II

Borough of Dartford

ANNUAL REPORT

ON CERTAIN MATTERS
CONCERNING

Public Health

FOR THE YEAR
1962

LIBRARY

INDEX.

Pages

INTRODUCTION i
SUMMARY ii
COMMENTARY 1 - 17

TABLES:

I Social conditions 18 & 19
II Births and deaths 20
III Causes of death according to sex 21
IV Causes of death according to age, Town 22
V Causes of death according to age, Bexley Hospital 23
VI Causes of death at ages 75 and over, Town 24
Causes of death at ages 75 and over, Bexley Hospital 24
VII Quarterly deaths etc. 25
VIII Main causes of death etc. (a) (b) & (c) 26 - 28
IX Prevalence of infectious disease 29
X Tuberculosis - Respiratory 30 & 32
Tuberculosis - Non Respiratory 32

XI Vaccinations:

(a) Poliomyelitis 33
(b) Smallpox 34
(c) Diphtheria 35
(d) Whooping Cough 36
(e) Tetanus 36
(f) Tuberculosis (B.C.G.) 36
XII (a) Accidents in the home 37
(b) Motor vehicle accidents 38
(c) Other accidents 38
(d) Suicide 38
APPENDIX I Housing 39
II Water 40
Swimming bath 40
III Drainage 41

IV Food Hygiene:

Food preparation 41
Milk 42
Ice Cream 42
Meat 43
Unsound food 43
Legal proceedings 43
V Food content 44
VI Air hygiene 44
VII Vermin control and disinfestation 45
VIII Hygiene of places of work 45
IX Hygiene facilities provided by Council 45
PUBLIC HEALTH COMMITTEE AND OFFICERS 46

BOROUGH OF DARTFORD.

Report for the year 1962 on certain matters concerning Public Health.

July, 1964.

TO THE MAYOR, ALDERMEN AND COUNCILLORS
OF THE BOROUGH OF DARTFORD.

Sir, Ladies and Gentlemen,

As soon as practicable after the end of each year it is the duty of a medical officer of health to make to the local authority a report for that year on the sanitary circumstances, sanitary administration, vital statistics and other public health matters concerning their district. The report that follows is written in compliance with that duty.

The information in this report contains much material provided by officers of other departments and other authorities or organisations. The facts on many environmental matters are the product of work by the Council's Public Health Inspectors. The presentation of the statistical material is a product of the patience of the clerical staff. I thank these colleagues for their co-operation.

On behalf of my colleagues in the public health office and myself I wish to thank the Chairman and Members of the Public Health Committee for their support and interest during the year under review.

I am, Sir, Ladies and Gentlemen,

Your obedient servant,

J.H.Hudson.

Medical Officer of Health.

1962

SUMMARY

The mild annual increase in the population continued.

The number of births was less than in 1961 and the birth rate decreased.

The adjusted death rate showed a decrease on 1961. The pattern of death was that to be expected in an area of S.E. England well provided with social services.

The town death rates for coronary disease and cancer of the lung were less than the rates for London.

January produced an exceptional number of town deaths in the aged. There was nothing outstanding in December when there was a noteworthy fog.

The death rate of Dartford residents from motor vehicle accidents was larger than that of England & Wales. The number of those resident in any district killed on roads in this Borough was less than in 1961.

Mild Virus B influenza occurred in England & Wales in early 1962 and in January seemed just perceptible in certain statistics here.

Live attenuated polio vaccine was introduced.

A substantial proportion of school children had received four doses of polio vaccine by the end of the year.

Smallpox appeared in this part of England and the number of persons vaccinated against smallpox was exceptionally great as a result of public demand.

Certain local questions relating to smallpox are discussed.

Only one case of whooping cough was notified in 1962.

The Council's programme for clearance of unfit houses was not completed by the end of 1962.

Legal proceedings relating to offences relating to food hygiene resulted in fines amounting to £146.

Smoke control orders came into operation for Area No. 2 (on the Heath side of Princes Road) and for Temple Hill North.

The pollution readings of the December fog are discussed.

1962

COMMENTARY.

POPULATION. In 1962 the trend of increase was still present in spite of the decline in new houses built in recent years. The rate of natural increase, i.e. excess of births over deaths per 1000 population, was 3.4 compared with 11 for the Rural District and 6 for England & Wales. If we exclude the deaths assigned to Bexley Hospital (our ever-present statistical inconvenience) we get a 1962 rate of 8.2 which seems more normal and over the last decade natural increase shows more consistancy.

	Births.	Town deaths.	Natural increase.	Town population (approx)	Rate.
1953	591	438	153	38,430	4.0
1954	579	351	228	38,410	5.9
1955	581	400	181	38,490	4.7
1956	632	387	245	38,850	6.4
1957*	697	328	369	39,980	9.2
1958	688	454	234	41,140	5.7
1959	700	436	264	41,940	6.3
1960	735	400	335	42,950	7.9
1961	824	452	372	43,460	8.6
1962	789	428	361	44,180	8.2

* A boundary adjustment brought 486 post-war houses + young families into the Borough.

BIRTHS. The trend has been as follows:-

	1956	1957	1958	1959	1960	1961	1962
Births	632	697	688	700	735	824	789
Birth rate*	15.0	16.3	15.9	15.6	15.9	17.6	16.6
Birth rate (England & Wales	15.7	16.1	16.4	16.5	17.2	17.4	17.4

* Adjusted by comparability factor.

The percentage of births at home is of interest. For those robust in mind and body, delivery at home is a rewarding feature of youthful good health and it is considered that 30% of all deliveries should take place at home. In domesticated Holland, with good health records for infants and mothers, 80% of births take place at home, but in U.S.A. it seems that no birth occurs at home by intention.

There are however factors of expediency which also influence the percentage of births at home in recent years. The increase in number of births has not been matched by an increase in hospital maternity beds but in some parts of the country it has been accompanied by earlier discharge of mothers from hospital.

In recent years the percentages have been as follows:-

	Births.	Nursery, home or hospital.	Elsewhere, i.e. own home.	% Home.
1956	632	530	102	16.0
1957	697	565	132	18.9
1958	688	538	150	21.8
1959	700	541	159	22.7
1960	735	552	183	24.9
1961	824	610	214	25.9
1962	789	588	201	25.5

DEATHS.

Deaths and the adjusted death rates from all causes in recent years have been:

	1955	1956	1957	1958	1959	1960	1961	1962
Borough Deaths (R.G.)	559	563	551	606	603	525	625	631
Town Deaths	401	387	328	454	436	400	452	428
Adjusted (C.F) Death Rates	13.6	10.1	9.8	10.6	11.6	9.9	11.8	10.6
Eng. & Wales Death Rates	11.7	11.7	11.5	11.7	11.6	11.5	12.0	11.9

These death rates allow comparison with other districts. In regard to other years comparisons express only whether the year of death is being advanced or postponed and to express the communal pattern of death, refinements such as age specific death rates, standardized mortality ratios, life expectancy tables or tables of years of life lost are necessary. To provide these for this district is beyond our resources, nevertheless, to do what we can to meet the need for more detail, we provide Tables VII and VIII.

MAIN CAUSES OF DEATH.

It is usual but not inevitable that the first quarter produces, compared with other quarters, the greatest number of deaths but in 1962 there was little difference between the 1st. and 2nd. quarters. The proportion of deaths from main causes and the proportions in old age groups were similar to those of England and Wales but there was an increased proportion in those aged 75+. Almost half the deaths in this Town occurred at over 75 years of age and almost half these deaths were from circulatory diseases. At over 75 years of age cancer was a less influential cause of death than under that age.

PLACE OF DEATH.

In regard to place of death, the older a person was and the further a person's home was from hospital, the less he appears likely to die in hospital. We now regard the population in the catchment area of our local hospitals as all of one community and one would not expect the percentages of those dying in hospital in the different districts to differ as much as they do. Perhaps it is that the deaths refer to a generation whose homes belong to a time when the districts were separate communities and the urban areas adjacent to hospitals now contain more newcomers who rely more on hospital care.

CIRCULATORY DISEASE.

Town deaths from this cause for 1958 to 1962 have been 165, 151, 148, 178 and 158. The percentages of deaths from this cause of 37% is similar to 38% of England and Wales. Of these deaths 58% occurred at the age of 75 or over.

Coronary Disease. There were 67 Town deaths, 11 under age of 55. Our death rate from this cause is somewhat less than elsewhere. Deaths for the last 5 years have been:

	Number Dartford Town	Rate per thousand population Dartford Town.	England & Wales.	London.
1958	76	1.9	1.86	1.84
1959	73	1.8	1.87	1.89
1960	70	1.6	2.01	2.02
1961	75	1.7	2.07	2.05
1962	67	1.5	2.20	2.26
	361	1.7	2.00	2.00

VASCULAR LESIONS OF NERVOUS SYSTEM. The number of Town deaths from this cause for the years 1958-1962 have been 51, 63, 34, 47 and 43, the percentage being 10%, the National figure being 14%. Of these deaths 53% occurred at age 75 or over. These percentages relate to 1962.

CANCER. In the years 1958-62 Town deaths from this cause have been 86, 92, 83, 75 and 68. The death rate in 1962 was 1.54 per thousand. The rate for England and Wales being 2.29. Almost three quarters of the deaths from this cause occurred before the age of 75.

Cancer of the lung. In the years 1958 to 1962 the deaths from this cause were:

	Number Dartford Town	Rate per 1000 population Dartford Town	England & Wales	London
1958	13	0.32	0.44	0.64
1959	25	0.60	0.46	0.64
1960	27	0.63	0.48	9.70
1961	20	0.46	0.49	0.67
1962	21	0.48	0.51	0.68

I repeat my inference of last year. As the figures from the Chest Clinic show about 8 lung cancers are found there each year from this district and as these are the early cases and as we have a score of deaths each year one can surmise that most lung cancers are being found too late.

Cancer of the uterus. In the years 1958 to 1962 the Town deaths from this cause were 4, 1, 1, 4, 2. In 1962 one was aged 67. The other was a condition which would not have been avoided by screening.

Leukaemia. The two deaths of 1962 were aged 45+.

RESPIRATORY DISEASE In 1962 more than half the deaths from respiratory disease occurred at the age of 75 or over and almost half occurred in the first quarter. Influenza due to the milder Virus B occurred in England and Wales in the first quarter but judging from the sickness benefit figures the disease had not a marked effect here. In December we had five days of fog.

Deaths and environment.

Cold weather, fog and influenza may be expected to adversely affect those who are frail, the degree of effect being related respectively to the adequacy of housing, the amount of pollution in the air and the degree of overcrowding. Cold, fog and 'flu tend to increase the deaths in the disease groups "respiratory", "circulatory" and "all causes".

Fog is an affliction which can overwhelm the failing heart and damaged lung. In December 1952 in Greater London 4000 additional deaths were estimated to have been immediately caused by a four day fog and in December 1962 a similar fog produced 700 such London deaths. The figures of atmospheric pollution will be discussed later in this commentary.

Most of the frail section of the community are contained in the old age group and as they begin to fail in their faculties they tend to withdraw from the community so that they get beyond the reach of the very social services designed for their welfare. With this in mind some welfare workers have thought that a register of the aged should be kept but those with the relevant information cannot supply it for this purpose as it is given to them in confidence. Registration of death however is inevitable and we have prepared tables V11 (b) and (c) to see if comparisons can be made of the effects of the fog month, winter and influenza on the aged with the effects on the rest of the community.

Furthermore as we have a large middle aged and aged population living in an environment controlled by central heating the experience of this community is presented for comparison. This tabular information we might usefully examine for indications that in 1962 and previous years the old age group have suffered more than is necessary owing to environmental adversities.

Comparisons in these tables made between the aged and the young, between deaths in December and other months in 1962 and between deaths inside and outside an institution during winter reveal nothing noteworthy, a fact which may presumably be interpreted as meaning that the aged are not suffering excessively.

Nevertheless while the fog month of December 1962 produced nothing exceptional it should not be overlooked that January, the influenza month, did contain an exceptionally large number of deaths in the old age group and that these were largely from circulatory and respiratory diseases.

Furthermore there is a hint that deaths from respiratory diseases form a greater proportion of all deaths in the institutions than outside and that the institutional population benefits more from an influenza-free year than the population outside. In this connection it might be of interest to mention that upper respiratory infection has been shown to be directly related to the dryness of space heating and that some people find it necessary to moisten the air of their heated offices.

DEATHS RELATING TO THE WELFARE OF MOTHERS

There were no maternal deaths and the death rate for infants before and after birth compared favourably with the rest of the Country.

The infant deaths in 1962 were as follows:-

Age		
Less than 1 day -	Immaturity	4
	Congenital malformation	2
	Asphyxia due to brow presentation	1
	Prolapsed umbilical cord	1
1 to 6 days -	Congenital malformation	2
	Intracranial haemorrhage	1
7 to 27 days -		0
28 to 364 days	Acute respiratory failure (premature)	1
	Acute capillary bronchitis	1
	Gastro-enteritis	1
	Congenital malformation	1
	Electrocution (home accident)	1

All the above deaths occurred after admission to hospital with the exception of three namely a congenital heart failure aged 3 days, the acute capillary bronchitis aged 2 months and the accident at home aged 8 months. The acute capillary bronchitis death was a sudden one. The death from gastro-enteritis related to an asian infant aged 2 months premature at birth.

DEATHS THROUGH VIOLENCE

Motor vehicle accidents

Deaths from motor vehicle accidents 1959-62 were 2, 9, 13 and 10. In 1962 the rate per 100,000 population for this Borough was 22, that for the Rural District 16 and that for England and Wales 13.5. This cause contributed 1.6 of deaths here compared with 1.6 in the Rural District amd 1.1% in England and Wales. Details in table XI.

Home accidents

Accidents at home produced 4 deaths in the Dartford group of hospitals all over 70 years of age. There were also 8 deaths from this cause not in these hospitals. Two of these were infants. There were also five deaths in a long stay hospital among the aged. Details in table XI. Falls and fractured femurs feature largely among the injuries.

Other accidents

There were no deaths from industrial accidents but two to boys at play.

Suicides

There were 5. In the ten years 1953-62 suicides have been:

	Av. Pop.	Number	Period	Rate/100,000/year
Dartford Town	41,000	53	1953-62	12.9
Northfleet U.D.	20,000	26	1953-62	13.0
Dartford R.D.	47,000	33	1953-62	7.2
Eng. & Wales	46,669,000	5589	1962	12.5
N. Ireland	?	?	1955	3.3

ACCIDENTS.

CASUALTIES. Admissions to the Dartford Group of Hospitals due to accidents in the home in 1962 show a picture similar to previous years. Burns from fireworks kept an adult in hospital 10 days. Scalds kept girls of 2 and 3 in hospital 7 and 43 days respectively.

At 329 the total casualties on our roads were 71 less than in 1961 and at 5 the persons killed was considerably below the 1961 figure of 13. In addition there are certain deaths occurring elsewhere and mentioned above.

We have no figures for accidents in industry which are the concern of the Inspector of Factories.

DISCIPLINE. The environmental health service has largely evolved from measures taken to control germ-borne disease and these measures have been amply supported by the defence mechanisms of Nature found in living material. Germ-borne disease has diminished in recent decades and the environmental hazards emerging to-day are physical and man-made. Accidents causing injury are a sequence of many such hazards and in controlling them we require a habit of thought different from that formerly in use.

For these physical hazards no benevolent influence from Nature lies in the background. Nature will share with us the responsibility of allowing a child to attend school during an epidemic of disease but Nature does not concern herself with the man-made risks of the child's home or the journey to school. In accidents it is Chance that plays the equivalent role. We should never assume that Chance will have the same benevolent disposition that we have come to expect from Nature.

The taking of risks can be followed by benefit as an alternative to accident and the chances of both receive some attention however scant before the risks are taken. Risks will always be taken and indeed may have to be taken. Accidents are therefore inevitable. Our objective should be to ensure that the sizes of the risks are reduced to a minimum and that accidents which do happen are the products of risks justifiable taken. For the accidents which are inevitable we want to know that first aid treatment is available and prompt access to hospital possible.

INFECTIOUS DISEASES.

GENERAL The question may arise as to why we take up so much space attempting to obtain a measure of the number of vaccinations which certain age groups have received during the course of recent years. The reason for this is that the progress of an outbreak of infectious disease depends on the proportion of susceptible individuals in the community. The disease seems to need a certain proportion of susceptible persons in order to obtain sufficient momentum to effectively spread. The fact that measles appears in large numbers on alternate years is probably due to the need for a two year collection of susceptible school entrants to get the disease established.

For diphtheria 75% of immune children has been the target for vaccination on the grounds that this measure of immunity is estimated as sufficient to prevent a substantial spread of the disease. When the disease has broken out, as it still does from time to time, it does seem as if this barrier is effective.

In normal times the percentages of people vaccinated against the various diseases will excite but little interest but when poliomyelitis, diphtheria or uncontrolled smallpox is a threat these figures will be regarded with concern or satisfaction according to their size.

To be brief, absolute numbers of vaccinations only provide partial information of our defences. Before the defences can be effectively measured these absolute figures need to be turned into percentages of the relevant population.

Virus Infections.

MEASLES

As expected, this disease began to appear late in 1962 according to its biennial pattern. The disease arrived in the R.D. before the Borough.

INFLUENZA

Influenza due to the mild Virus B occurred in England and Wales in the first quarter. We only had two (R.G.) deaths attributed to that disease. There was not much evidence of it in the sickness benefit figures. The increase of these was limited to the middle two weeks of January and it may be that even this increase was inflated with absence from work owing to smallpox vaccinations. However as we have seen the deaths of the aged in January were exceptionally numerous.

POLIO-MYELITIS

No case of poliomyelitis occurred in 1962, the last year when the disease appeared was 1957 when we had 6 cases. In England and Wales the number of cases notified in 1962 was the lowest in post-war years.

In 1962 a vaccine made from a live virus given by mouth was introduced throughout the country. This replaced the vaccine made from inactivated virus given by injection unless the latter was particularly requested. This new vaccine of attenuated virus is able to infect the intestine and by establishing itself there is able to prevent a further infection by the wild harmful viruses. It will be seen from Table X that by the end of 1962 a substantial proportion of the young population had had three doses of poliomyelitis vaccine within the last five years and that a substantial proportion of school children had had four doses of vaccine.

SMALLPOX.

Smallpox will be discussed below in a separate section.

GERMAN MEASLES

There is evidence that in the first half of 1962 the incidence of German measles (rubella) was exceptionally high in England and Wales. Rubella is not notifiable here and our sole source of statistical information is from the weekly reports sent to us by the head teachers of schools and these recorded 116 cases mainly during April, May and June. Rubella is a disease of some significance on account of the association with congenital defects in a proportion of infants whose mothers have acquired the infection during early stages of pregnancy.

Bacterial Infections.

RESPIRATORY TUBERCULOSIS

26 cases were notified, this gives a rate of 56 per 100,000 compared with 38 for England and Wales and 33 for Kent. For the 17 town notifications the rate is 39. The number of cases on the register is about stationary but it must be noted that, being a chronic disease, removals from the register may be delayed. The Chest Physician states that "After a sharp drop in the late fifties in the number of new cases of pulmonary tuberculosis found annually, it would now appear that the incidence is levelling out and I would not be surprised if future experience shows that this represents a basic figure which it would be very hard to get below." Of the 9 removed from the register by death only the deaths of 3 were classified to tuberculosis.

MASS X-RAY

Tuberculosis

The Mass X-ray service visited the district in 1962 and 11,251 persons were X-rayed. 0.8 per thousand of these were found to require close supervision or treatment. In England and Wales the rate is 1.4. Most, indeed all, cases here were found in 3941 persons who had not previously been X-rayed, the rate in these being 1.5 per thousand. This indicates the need for the X-ray of those who have hitherto not received this service.

Cancer

1324 persons were X-rayed in the over-45 service, the object of which is to detect lung cancer.

It will be seen that 4 persons with cancer were found in the whole survey.

NON-RESPIRATORY TUBERCULOSIS

Our 2 notifications gave us a rate of 4 per 100,000 population. The rate for both England and Wales was 6.

DIPHTHERIA

1962 was the 15th successive year in which no diphtheria occurred in this district.

The diphtheria immunity index for children under 5 years of age at the end of 1962 (i.e. the percentage of the total number who had completed a course of immunisation within the past 5 years) was 77% with our estimate of the child population. The figure for England and Wales was 54%. Of those in this district with this degree of immunity over half had received their immunity within the last 2 years. These figures display an effective impediment to the spread of diphtheria should it come to this district.

The immunity figures for diphtheria also convey an idea of the immunity against whooping cough and tetanus now that a vaccine conveying immunity to all three diseases is predominantly in use.

WHOOPING COUGH

In 1961 the number was 11, in 1962 there was only 1. A marked reduction occurred also in England and Wales. The proportion of children here under 5 years of age who at the end of 1962 had received a course of vaccination was 80% according to our estimate of the child population.

DYSENTERY

3 cases of dysentery were notified in December. They were aged 5 and 6 years. The organism was not identified.

Worm Infestation.

BEEF TAPEWORM

The one food poisoning notification of 1962 referred to an infestation with the beef tapeworm. The patient was a young man who had worked several years in India.

SMALLPOX.

Recent Problems

In recent years certain local matters relating to the control of smallpox have been before us. They were (1) revaccination of school children, (ii) vaccination records, (iii) the path by the smallpox hospital, (iv) disposal of smallpox dead, (v) smallpox 1962, (vi) immunity clinics, (vii) co-operation, (viii) the future.

(i) Revaccination of school children.

Routine infant vaccination may be controversial but those children who have been vaccinated in infancy can be revaccinated in school life without the risk of serious complications and this is one of the benefits of infant vaccination. If herd immunity is a desirable adjunct in the control of smallpox in this country then revaccination of school children owing to the ease with which it can be arranged, is an expedient way of doubling the size of the small fraction of the population which possesses immunity. This town has as much need for this immunity as anywhere yet no particular effort is made to encourage the revaccination of school children. If the parents take the initiative revaccination can be obtained through family doctors but up to 1962 the revaccinations done were negligible in number.

(ii) Vaccination records.

Vaccination policy is based not only on the risks of smallpox but on the assessment of the risks of vaccination and revaccination at different ages. For certain adults vaccination records have not been required in the past and for assessment of risk more complete records have seemed desirable. However after 1962 owing to the burden on public funds, more apparent than real, caused by payment for records of vaccination in the 1962 outbreak, the age groups for which records would be required in the future were limited still further. This re-arrangement we opposed but our opposition was unsuccessful. Records will therefore be less, not more, complete in the future.

(iii) Path by the small-pox hospital. Up to 1950 Long Reach Hospital was in an unfrequented part of the Thames-side marshes but since then there has been local housing development which has brought the town much nearer to the hospital with an increasing number of persons wishing to use the open spaces alongside the river. One boundary of the hospital is adjacent to the river bund along the top of which there has always been a footpath. In 1953, following the floods, this bund was strengthened with an increase in width of the path almost to that of a road and increased incentive for the local population to use it. When the hospital is occupied what is now a riverside walk offers greater opportunity than formerly for infection to get from the hospital to the general community. The risk is only small but what is being risked is serious and the cost of its avoidance by temporary closure is negligible.

In 1960 a request was made by this Council to the Ministry of Transport for legislation which would provide for the temporary closure of the path when smallpox patients are being cared for in the hospital. The clause to this effect however was excluded from amending legislation of 1961, it is in mind for future legislation but this will not be feasable for some time. In early 1961 therefore the Ministry of Health were requested to make appropriate regulations under the Public Health Act but they considered that this Act could not be used for the purpose.

(iv) Disposal of smallpox dead. Up to 1957 the bodies of those who had died in the smallpox hospital were disposed of by the hospital authority by burial in their cemetary in the immediate visinity. That year however the management committee changed their practice by discontinuing the use of this cemetary and in effect the public health office had to provide at short notice arrangements for the disposal of the bodies of those dying from smallpox. Two deaths from the disease occurred and the bodies with disinfectant were encoffined in lined coffins by our hospital colleagues, then we took the encoffined bodies for disposal to the crematorium. The vaccinal state of all concerned was such that they could be regarded as immune to the disease.

The possibility of further deaths had to be provided for at that time and for subsequent occasions and a code of practice was evolved which provided for safe encoffinment, cremation where possible and the persons concerned to be limited in number and these to have established immunity. The code of practice is almost the best that is practicable but it falls short in the following ways:-

(i) The type of coffin should be appropriate to the method of disposal but the coffin is not ordered by the office arranging disposal.

(ii) Transport by an immune driver and co-driver is provided by the funeral directors who have a contract with the Council and who have been most co-operative. The firm holding the contract may change.

In 1962 the body of a Pakistani was disposed of by burial in the Town cemetary in accordance with Mohammedan custom.

(v) Smallpox 1962.

Smallpox was introduced by air into this country in December 1961 and January 1962 and there followed 62 indigenous cases in England and Wales with 24 deaths.

A Pakistani with smallpox was admitted to Long Reach Hospital on December 28th. 1961. He died on January 7th. 1962. A person working in Dartford but living in Woolwich was admitted with smallpox on January 24th. A person from Hornchurch working by the Thames opposite Dartford was admitted with smallpox on January 29th. 4 suspected cases of smallpox were isolated in the hospital, of these, three finally were regarded as not smallpox while one may have been smallpox without a rash.

The family and business contacts in Dartford of the Woolwich patient were vaccinated and kept under observation. The family contact in Dartford was required to stop work and given compensation for this.

A large demand for vaccination occurred amongst the public and records (Table 11) which show a marked increase on previous years give an underestimate as family doctors in January and February were overburdened with requests for vaccination and the pressure of work meant that records were inevitably incomplete. Furthermore vaccinations in industry and hospitals were not used for statistical purposes. A certain few members of the public claiming to be contacts, albeit distant, of known cases or working in close contact with Pakistanis who could not get vaccinated by their own doctors were vaccinated in or from this office, it being more expedient to vaccinate these doubtful contacts than to discuss at length the justification of their request. By intention no vaccination was done for employees of this Council except for the few engaged in smallpox affairs. Although general vaccination of the public was never publicly advocated the question did arise when, at the end of January, Dartford was suspected as a source of infection. A request was then made for public vaccination facilities but this was not granted, there being no authority to provide such facilities until an epidemic existed and their provision being likely to create public anxiety.

The infant vaccination rate in 1962 not only showed a marked increase on preceding years but was considerably greater than that of England and Wales. Furthermore we finished 1962 with more than a quarter of the eligible school children revaccinated and with the primary vaccinations of school children done more than a quarter of the school population obtained substantial immunity to the disease.

In August 1962 there was another importation of smallpox, this time by sea. In a family arriving from Bombay, three children were found to have the disease and were also accommodated in Long Reach Hospital.

(vi) Immunity Clinics.

Vaccination against smallpox consists of the insertion of living virus into the skin to cause a mild disease which in certain limited circumstances can be contageous. In a few rare persons with rare characteristics it can cause serious illhealth and even death. Public demand for vaccination in 1962 in England & Wales was responsible for almost 10 million vaccinations and these vaccinations caused over 100 severe illnesses and 16 deaths. Hence it is that rushed vaccinations done indescriminately by the thousand as a result of demand rather than need and without opportunity to detect contraindications are deplored. "Mass vaccination" as the phenomenon is called is almost an obscene term in public health circles and in essence it implies that either the disease is out of control or the public are not being wisely influenced.

The opening of a public clinic for vaccination most unfortunately may be interpreted by the public as a sign of urgency, it may initiate excessive demand and may lead to "mass vaccination". Another response is however possible. The opening of a clinic could be interpreted as a reassuring sign that ample lymph and facilities are available for use according to advice being given.

This second response is made improbable by the nature of our propaganda. The only public persuasion that exists on this subject gives unqualified support to the practice of vaccination and the public are naturally impatient with talk of risks of vaccination on the one occasion when to them the need according to previous propaganda has become apparant. A better belief would be that there is a minute risk associated with adult primary vaccination, a smaller risk with adult revaccination and that even when smallpox is not under complete control the risk to the individual member of the general public of getting the disease is minute.

Up to the end of January in Dartford all possible emphasis was placed on the needlessness and undesirability of facilities for vaccination of the general public other than near contacts of the disease and this was accepted by those with whom one was associated e.g. members of authorities. Nevertheless many of the public were seeking vaccination from their doctors. At the end of the month Dartford was regarded in the Ministry as a likely source of infection of the Woolwich case. There were also other features which could not immediately be dismissed as extraneous, the most meaningful being a death of an aged man from chicken pox. Furthermore if the Woolwich and Hornchurch patients were infected by "missed" cases more patients with smallpox were likely. Thus it seemed that the risks of smallpox in Dartford had overtaken the risks of vaccination and for this reason and to relieve the pressure on local doctors I asked for public vaccination facilities to be provided by the Local Health Authority.

On epidemiological grounds the provision of these facilities would have been justified but whether their presence would have created excessive anxiety here and elsewhere is another matter. It is however a reflection on our relations with the public that it was substantially the answer to this latter question which I believe determined that these facilities should not be provided.

The following might in future avoid needless public anxiety and needless public demand:

(1) public vaccination facilities available if necessary to meet public demand:

(2) persons with contra-indications to be vaccinated only, if at all, by their family doctor,

(3) emphasis on the need to follow authoritive advice in making use of vaccination facilities,

(4) advice deliberately over simplified into a colour code e.g.

Risks of smallpox.

Green: less than risks of vaccination.
Blue: greater than risks of revaccination.
Yellow: greater than risks of adult primary vaccination.
Brown: substantially greater than risks of adult primary vaccination.
Red: vaccination necessary as public health measure.

In Dartford at the end of January a blue intimation would have been appropriate.

(vii) Co-operation.

Smallpox is a rare intrusion on the health of this country and the administrative practices and law cannot be expected to provide for all the unforseen eventualities which an uncommon capricious disease may produce. Co-operation is therefore an essential ingredient in its control.

Before 1948 local bodies were responsible for infectious disease hospitals, their medical and nursing personnel, the local clinics and the ambulance services. With all these the Medical

Officer of Health was closely associated and to deal with smallpox there were ample facilities responsive to local influence.

To-day in County Districts such as this the Medical Officer of Health is administratively disabled and for several important facilities he must depend on the larger distant authorities whose officers are not intimately informed on a changing local situation.

Formerly, when smallpox was more prevalent, biological control took priority over administrative precision. Now that the disease is rare the latter is more assertive.

Measures for smallpox control here are good but for the above reasons they are not the best that are practicable.

(viii) The future.

There are 50 beds at Long Reach hospital maintained to care for smallpox patients and there must therefore exist an authoritative opinion that provision has still to be made for a sizeable outbreak.

Nevertheless the situation is changing. The endemic areas of the world are coming under greater control and world incidence is decreasing. By international agreement more effective control at the airports is likely. Vaccines using attenuated or dead virus are being studied. A drug of interesting promise has appeared.

Furthermore although recent outbreaks have illustrated the insidious way the disease can spread there have also been occasions when the failure to spread has been surprising. Chance can work in our favour as well as against us.

Having regard to the above we may conclude that although our measures for control may not be the best that are practicable they are generally good and at present are likely to suffice.

ENVIRONMENTAL CONDITIONS.

HOUSING.

Fewer houses were built in 1962 than previous years. The number of applicants for council tenancies however was also down. There were 96 applicants for medical priority of which 32 received none and 5 received high priority. It is of interest that the Council made good use of their ability to make discretionary grants for house improvement.

The five year programme of "slum" clearance was not completed by 1962. The Council's Chief Public Health Inspector writes "The numbers of unfit houses repaired and demolished are both low but not for the right reasons. There are houses needing repair and houses ripe for demolition. The rate of repair is at the moment governed by the availability of building labour which for some years has been barely adequate to deal with smoke control area conversions, improvement grant works and ordinary routine repairs arising out of owners requests or Public Health Act notices.

The rate of demolition is governed to a great extent by the local authority's capacity to rehouse the occupants. The demands of the normal waiting list are such that during 1962 a terrace of seven houses which one might have expected to have been the subject of a clearance order were dealt with as individually unfit. The necessity of having to have some regard to Town redevelopment proposals has also exerted an effect upon the clearance of unfit houses."

In regard to the new regulations for houses in multiple occupation "the few problems arising from multiple occupation in this area are not ones arising from bad management but rather of inadequate amenities in small houses which present difficulties in so far as conversion is concerned."

FOG, 1962. From December 3rd. - 7th. there was the worst fog since that of December 1952. The fog extended to a height of 300-400 feet and it was exceptionally cold, the minimum temperature being -6°c (21°F). London with its large population and abundant pollution has provided meaningful statistical studies on the effects of urban fog and the best way of discussing the fragmentary details of the fog at Dartford is to see how they fit into the more comprehensive information of London.

Mortality. Additional immediate deaths attributable to the two fogs in London were:

	1952.	1962.
Greater London	4000	700
London A.C.	2000	350

A feature of the 1962 fog in London was that a third of the deaths were at ages under 70 years. In 1962 the additional deaths were about 1 per 10,000 population, a rate which would be expected to produce only 4 or 5 deaths in our population here, a number barely discernable. However our December 1962 deaths (Table VIII (b)) do show an increase of this order at ages of under 75 and do contain 5 deaths from respiratory causes (Bronchitis 3, pneumonia 2.) all middle aged except for an infant.

Morbidity. In London the 1962 fog was accompanied with an increase of 50% in the new claims for National Insurance sickness benefit. In Dartford the rise was 25%. The increases for urban Dartford and Gravesend are appreciably greater than for suburban Sevenoaks.

New claims for sickness benefit.

Week ending	Dartford.	Gravesend.	Sevenoaks.
December 4	303	240	99
December 11	377	333	105
December 18	230	246	104
% increase	25%	37%	6%

The rise in these claims is in keeping with the London experience that the 1962 fog differed from the 1952 fog by substantially affecting the middle aged (i.e. those working) as well as the aged.

Pollution. The indicators used as crude measurements of pollution are:

Air stain	- the darkness of paper that has filtered air daily (micrograms per cubic metre).
Air acidity	- mainly SO_2 which bubbled through H_2O_2, records its acidity daily (micrograms per cubic metre).
Air sulphur	- mainly SO_2 which acts on exposed $Pb\,O_2$ the sulphates formed being measured monthly (arbitrary units).
Air deposit	- dust falling by gravity into a bowl measured monthly (milligrams per sq. metre per day) (undissolved).

Normally urban pollution is dispersed by upward turbulence caused by air currents rising from the warm ground. In fog the cold ground surface holds down pollution and owing to lack of escape there is a tendency to sideways spread.

Hypothesis. "The level of pollution (in London) begins to exert a marked effect upon mortality when the daily concentration reaches 2000 micrograms of black suspended matter and 1150 micrograms of acidic gases per cubic metre of air though the evidence so far does not preclude smoke being the determining factor rather than the two pollutants in combination." (Scott.Med. Off. 16.10.59)

Average Winter pollution. For Winter ending March 1962 the averages were:

	Southwark 3	Dartford (4 & 6)
Smoke	245	140
Acidity	270	180
Sulphur	4.3	2.0
Deposit (undissolved)	114	148

Pollution in fog. In London the fogs produced the following maximum measurements at Westminster:

	Smoke	SO_2
1952	4500	3750
1962	2750	4000

The 1952 figure for smoke is considered an underestimate as the filtering area was overloaded and the carbon particles were piling up and not increasing the darkness of the stain. The true reading is thought to be about 7000.

For December 1962 the sulphur gauge reading in Charing Cross was 6.5 and at Southwark the deposit was 135.

In December 1962 the fog pollution map of London was like a target with the city and centre providing a black bull's eye of over 4000 smoke and SO_2 and the periphery of greater London providing an outer ring of 1000 - 2000. Dartford was in this outer ring and the recordings of the Council's Public Health Inspectors fit into this picture. At 986 the smoke readings in Dartford did not in fact quite reach the 1000 figure while at 1850 the SO_2 figure showed a markedly greater increase and owing to this the smoke /SO_2 ratio fell. In centre of Dartford it seems that the fog brought down pollution from the smoke-free non domestic sources i.e. from hospitals, factories and commercial premises with their central heating at full load and their higher chimneys not providing the customary means of escape for their pollution. Furthermore as SO_2 drifts further than smoke in foggy conditions it may be that we receive pollution from our neighbouring generating stations (in spite of C.E.G.B's delightful coloured aerial photographs of generating station chimneys peeping above a fog).

At 3.3 the sulphur reading of the Dartford lead dioxide gauge for December 1962 was high. At 113 the undissolved deposit reading showed nothing out of the ordinary.

There is another possible explanation of the low smoke/SO_2 ratio and it is that the dark stain of the filter paper had been lightened by pale dust from cement works suspended in the air as well as smoke. If this were so it would be of interest as the part played by dust from cement works in fog might be worth attention.

Summary. The results of the fog of 1962 in Dartford were similar to those in London, the difference being mainly of degree.

TABLE I.

SOCIAL CONDITIONS.

Area (acres)	4,292
Population (Census 1931)	28,928
" (Census 1951)	40,544
Mid-year home population 1961 (Registrar's General's estimate)	45,460
" " " " 1962 " " "	46,180
Number of dwellings (items 1,2,3,6 and 13 of Table 1 of abstract of accounts) - 31.3.62	13,927
Rateable value - 31.3.62	£750,492
Sum represented by 1d. rate	£3,066

POPULATION. Increases in the population are due to natural causes, i.e. excess of births over deaths, and immigration, both being related to new houses built.

Year	1956	1957	1958	1959	1960	1961	1962
Est. mid-year home population	40,850	42,450	43,140	43,940	44,950	45,460	46,180
Increase or decrease on previous year	+360	+1,610	+680	+800	+1,010	+510	+720
Natural increase (excess of births over deaths)	68	146	82	97	210	199	158
Immigration or emigration	+292	+1,464	+698	+703	+800	+311	+562
Houses built	94	323	322	407	253	191	144
Houses build and absorbed by 1957 boundary change.	219	46	-	-	-	-	-

COMPARABILITY FACTORS. When local crude birth and death rates are multiplied by the area comparability factors they are comparable with the rate for England and Wales or with the adjusted rate for any other area. In the last eight years the factors for births (governed by the proportion of women aged 18 - 44 years) and for deaths (governed by the proportions of all age groups) have been as follows:

Year	1955	1956	1957	1958	1959	1960	1961	1962
Births	0.96	0.98	0.98	0.98	0.98	0.97	0.97	0.97
Deaths	0.98	0.73	0.74	0.76	0.85	0.85	0.86	0.78

From 1953 to 1957 all deaths at Bexley Hospital were assigned to Dartford. From 1958 onwards only deaths of persons resident at the hospital six months or more were so assigned.

The following give a glimpse of some social conditions -

	1960	1961	1962
Cases dealt with by the N.S.P.C.C. -			
Children affected	58	82	44
Prosecution for neglect	-	1	-
Unemployed on Dec. 31st.(Dartford and district)			
Men	117	126	632
Women	35	33	38
Illegitimate birth rate for 1,000 births -			
Dartford Borough	35	33	40
Dartford Rural District	30	22	29
England and Wales	54	59	66

DWELLINGS ACCORDING TO RATEABLE VALUE 1.4.62.(per thousand).

Not exceeding £10	3‰
Exceeding £10 but not over £13	13‰
" £13 " " " £18	100‰
" £18 " " " £25	256‰
" £25 " " " £30	273‰
" £30	355‰

TABLE I (continued)

POPULATION OF YOUNG PERSONS.

An estimate of the population in the young age groups is necessary in order that we may gauge from vaccinations done the proportion who have been given immunity to certain infectious diseases. A rough estimate can be made from the births which have occurred in the district in the relevant years but it assumes a stable population and does not take into account deaths after one year of age.

Year	Births	Infant deaths	To reach age of 1 year.		
1962	789	16	773	Approximate population December 1961 0 - 4 years = 3661	
1961	824	17	807		
1960	735	11	724		
1959	700	11	689		
1958	688	20	668		
1957	697	6	691		
1956	632	14	618	Approximate population December 1961 5 - 11 years = 4088	Approximate population December 1961 5 - 15 years = 6803
1955	581	12	569		
1954	579	10	569		
1953	591	14	577		
1952	533	18	515		
1951	562	13	549		
1950	594	10	584	Approximate population December 1961 12 - 15 years = 2715	
1949	656	18	638		
1948	722	17	705		
1947	816	28	788		
1946	729	18	711	Approximate population December 1961 16 - 18 years = 1900	
1945	581	17	564		
1944	651	26	625		
1943	599	33	566		

Certain populations also useful in returns are grouped differently from the above -

Local estimates:

	Population
Born 1957 - 1962, December aged 0 - 5 years.	4352
" 1943 - 1956, December aged 6 - 19 years	8578
" 1943 - 1962, December aged 0 - 19 years	12930
" 1948 - 1962, December aged 0 - 14 years	9676
" 1948 - 1957, December aged 5 - 14 years	6015

Population of school children in primary schools, September Term 1962 = 4,560.

1961 Census:

Males		Females	
15 - 44	9264	15 - 44	9528
45 - 64	5753	45 - 59	4756
65+	1982	60 +	4411
	16999		18695

Persons aged under 15 years	10452
" " 15+	35694
	46146

Dwellings	13,727	Vacant spaces	155	Sharing	290
Households	13,879	Non perm. dwells.	11	Share kitchen	203
Rooms	64,012	Owner occupiers	7,010	Crowded	172

TABLE II - BIRTHS & DEATHS, 1962.

		M	F	Persons
Live Births:	Legitimate	358	399	751
	Illegitimate	17	15	32
		375	414	789
Deaths from all causes:		319	312	631
Deaths from pregnancy, childbirth, abortion		-	-	-
Stillbirths:	Legitimate	8	6	14
	Illegitimate	1	1	2
		9	7	16
Infant deaths by age:				
0 to 6 days :	Legitimate	7	4	11
	Illegitimate	-	-	-
		7	4	11
7 to 27 days:	Legitimate	-	-	-
	Illegitimate	-	-	-
		-	-	-
28 to 364 days:	Legitimate	1	3	4
	Illegitimate	-	1	1
		1	4	5
Total under 1 year:				
	Legitimate	8	7	15
	Illegitimate		1	1
		8	8	16

Rates per 1,000 Home Population

	Dartford Borough	England & Wales
Crude live birth rate	17.1	18.0
Live birth rate adjusted by comparability factor	16.6	18.0
Crude death rate	13.7	11.9
Death rate adjusted by comparability factor	10.6	11.9

Rates per 1,000 Live and Stillbirths

	Dartford Borough	England & Wales
Maternal death rate	0	0.35
Stillbirth rate	19.9	18.1
Perinatal death rate (s.bs. & deaths 0-6 days)	33.5	30.8

Rates per 1,000 Live Births

	Dartford Borough	England & Wales
Neonatal death rate (deaths 0 - 27 days)	13.9	15.1
Infant death rate (deaths 0 - 364 days)	20.3	21.6

TABLE III - CAUSES OF DEATH ACCORDING TO SEX.

BOROUGH - Registrar General's Return.

	M	F	Persons	
All causes	319	312	631	
Tuberculosis, respiratory	1	3	4	
Tuberculosis, other	-	-	-	
Syphilitic disease	2	3	5	
Diphtheria	-	-	-	
Whooping Cough	-	-	-	
Meningococcal infections	-	-	-	
Acute poliomyelitis	-	-	-	
Measles	-	-	-	
Other infective and parasitic disease	2	-	2	
Malignant neoplasm, stomach	7	2	9)	
Malignant neoplasm, lung, bronchus	19	4	23)	
Malignant neoplasm, breast	-	10	10)	82
Malignant neoplasm, uterus	-	2	2)	
Other malignant and lymphatic neoplasms	18	18	36)	
Leukaemia, aleukaemia	2	-	2)	
Diabetes	3	5	8	
Vascular lesions of nervous system	29	30	59	
Coronary disease, angina	64	31	95)	
Hypertension with heart disease	6	11	17)	245
Other heart disease	27	60	87)	
Other circulatory disease	20	26	46)	
Influenza	-	2	2)	
Pneumonia	33	39	72)	118
Bronchitis	26	9	35)	
Other diseases of the respiratory system	6	3	9)	
Ulcer of stomach and duodenum	2	1	3	
Gastritis, enteritis and diarrhoea	2	3	5	
Nephritis and nephrosis	4	2	6	
Hyperplasia of prostate	4	-	4	
Pregnancy, childbirth, abortion	-	-	-	
Congenital malformations	3	6	9	
Other defined and ill-defined diseases	21	28	49	
Motor vehicle accidents	8	1	9)	
All other accidents	7	11	18)	
Suicide	3	2	5)	32
Homicide and operations of war	-	-	-)	

TABLE IV - CAUSES OF DEATH ACCORDING TO AGE

TOWN - Compiled locally.

	All ages	Under 4 wks	4 wks - 11 mos	1 year	2 - 4	5 - 14	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	
All causes	428	11	4	6	2	3	6	4	10	42	60	78	202	
Tuberculosis, respiratory	1	-	-	-	-	-	-	-	-	-	-	1	-	
Tuberculosis, other	-	-	-	-	-	-	-	-	-	-	-	-	-	
Syphilitic disease	3	-	-	-	-	-	-	-	-	-	-	2	1	
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-	
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-	
Meningococcal infections	-	-	-	-	-	-	-	-	-	-	-	-	-	
Acute poliomyelitis	-	-	-	-	-	-	-	-	-	-	-	-	-	
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other infective and parasitic disease	2	-	-	-	-	-	-	-	-	1	-	1	-	
Malignant neoplasm, stomach	5	-	-	-	-	-	-	-	-	-	2	2	1	68
Malignant neoplasm, lung, bronchus	21	-	-	-	-	-	-	-	-	6	6	5	4	
Malignant neoplasm, breast	8	-	-	-	-	-	-	-	-	2	-	2	4	
Malignant neoplasm, uterus	2	-	-	-	-	-	-	1	-	-	-	1	-	
Other malignant and lymphatic neoplasms	30	-	-	-	-	-	1	-	1	7	5	6	10	
Leukaemia, aleukaemia	2	-	-	-	-	-	-	-	-	1	-	1	-	
Diabetes	6	-	-	-	-	-	-	-	-	-	-	1	5	
Vascular lesions of nervous system	43	-	-	-	-	-	-	-	-	1	11	8	23	
Coronary disease, angina	67	-	-	-	-	-	-	-	2	9	9	20	27	158
Hypertension with heart disease	8	-	-	-	-	-	-	-	-	1	3	1	3	
Other heart disease	43	-	-	-	-	-	1	-	1	2	5	3	31	
Other circulatory disease	40	-	-	-	-	-	-	-	-	2	4	3	31	
Influenza	1	-	-	-	-	-	-	-	-	-	-	-	1	64
Pneumonia	32	-	-	1	-	-	-	-	-	1	3	4	23	
Bronchitis	27	-	1	-	-	-	-	-	1	3	2	11	9	
Other diseases of the respiratory system	4	-	-	1	-	-	-	-	-	-	2	-	1	
Ulcer of stomach and duodenum	2	-	-	-	-	-	-	-	-	-	-	-	2	
Gastritis, enteritis and diarrhoea	4	-	1	1	-	-	-	-	-	-	2	-	-	
Nephritis and nephrosis	5	-	-	-	-	-	-	-	1	1	1	-	2	
Hyperplasia of prostate	4	-	-	-	-	-	-	-	-	-	-	2	2	
Pregnancy, childbirth, abortion	-	-	-	-	-	-	-	-	-	-	-	-	-	
Congenital malformations	7	4	1	1	-	-	-	1	-	-	-	-	-	
Other defined and ill-defined diseases	36	7	-	1	1	1	2	1	2	-	4	3	14	
Motor vehicle accidents	8	-	-	-	1	-	1	-	2	2	1	-	1	25
All other accidents	12	-	1	1	-	2	-	-	-	1	-	1	6	
Suicide	5	-	-	-	-	-	1	1	-	2	-	-	1	
Homicide and operations of war	-	-	-	-	-	-	-	-	-	-	-	-	-	

TABLE V - CAUSES OF DEATH ACCORDING TO AGE.

BEXLEY HOSPITAL - Compiled locally
(Resident more than 6 months).

	All ages	0 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75 +	
All causes	205	1	3	3	27	61	110	
Tuberculosis, respiratory	5	-	-	-	1	4	-	
Tuberculosis, other	-	-	-	-	-	-	-	
Syphilitic disease	1	-	-	-	-	1	-	
Diphtheria	-	-	-	-	-	-	-	
Whooping Cough	-	-	-	-	-	-	-	
Meningococcal infections	-	-	-	-	-	-	-	
Acute poliomyelitis	-	-	-	-	-	-	-	
Measles	-	-	-	-	-	-	-	
Other infective and parasitic disease	1	-	-	-	-	-	1	
Malignant neoplasm, stomach	2	-	-	-	1	1	-)	13
Malignant neoplasm, lung, bronchus	1	-	-	-	1	-	-)	
Malignant neoplasm, breast	2	-	-	-	-	2	-)	
Malignant neoplasm, uterus	-	-	-	-	-	-	-)	
Other malignant and lymphatic neoplasms	8	-	-	-	3	4	1)	
Leukaemia, aleukaemia	-	-	-	-	-	-	-)	
Diabetes	2	-	-	-	1	-	1	
Vascular lesions of nervous system	16	-	2	2	2	5	5	
Coronary disease, angina	21	-	-	-	6	4	11)	90
Hypertension with heart disease	8	-	-	-	1	2	5)	
Other heart disease	51	-	-	-	1	10	40)	
Other circulatory disease	10	-	-	-	2	2	6)	
Influenza	-	-	-	-	-	-	-)	58
Pneumonia	48	1	-	-	1	18	28)	
Bronchitis	8	-	-	-	4	2	2)	
Other diseases of the respiratory system	2	-	-	-	-	2	-)	
Ulcer of stomach and duodenum	2	-	-	-	-	1	1	
Gastritis, enteritis and diarrhoea	1	-	-	-	-	-	1	
Nephritis and nephrosis	-	-	-	-	-	-	-	
Hyperplasia of prostate	-	-	-	-	-	-	-	
Pregnancy, childbirth, abortion	-	-	-	-	-	-	-	
Congenital malformations	-	-	-	-	-	-	-	
Other defined and ill-defined diseases	9	-	-	1	2	1	5	
Motor vehicle accidents	2	-	1	-	1	-	-)	7
All other accidents	5	-	-	-	-	2	3)	
Suicide	-	-	-	-	-	-	-)	
Homicide and operations of war	-	-	-	-	-	-	-)	

TABLE VI - CAUSES OF DEATH AT AGES 75 YEARS AND OVER.

Town.

	Total persons	Male						Female						
		Total	75 - 79	80 - 84	85 - 89	90 - 94	95+	Total	75 - 79	80 - 84	85 - 89	90 - 94	95+	
All causes	202	96	33	37	18	8	-	106	31	34	23	15	3	
Syphilitic disease	1	1	1	-	-	-	-	-	-	-	-	-	-	
Malig. neopl.,stomach	1	1	-	1	-	-	-	-	-	-	-	-	-)	19
Malig. neopl., lung, bronchus	4	3	1	2	-	-	-	1	-	1	-	-	-)	
Malig. neopl., breast	4	-	-	-	-	-	-	4	1	1	-	2	-)	
Oth. malig. & lymphatic neopls	10	7	4	3	-	-	-	3	2	-	-	-	1)	
Diabetes	5	1	1	-	-	-	-	4	2	2	-	-	-	
Vasc. lesions of nerv. system	23	13	6	4	1	2	-	10	4	2	1	2	1	
Coronary disease angina	27	14	4	6	3	1	-	13	6	6	1	-	-)	92
Hypertension with heart dis.	3	-	-	-	-	-	-	3	2	1	-	-	-)	
Other heart disease	31	10	2	3	4	1	-	21	4	5	6	6	-)	
Other circulatory disease	31	14	3	6	3	2	-	17	2	4	8	3	-)	
Influenza	1	-	-	-	-	-	-	1	-	1	-	-	-)	34
Pneumonia	23	11	3	5	2	1	-	12	4	4	3	1	-)	
Bronchitis	9	5	2	2	-	1	-	4	1	2	-	-	1)	
Oth. dis. of the resp system	1	1	1	-	-	-	-	-	-	-	-	-	-)	
Ulcer of stomach & duodenum	2	1	-	-	1	-	-	1	-	1	-	-	-	
Nephritis, nephrosis	2	2	1	-	1	-	-	-	-	-	-	-	-	
Hyperplasia of prostate	2	2	1	1	-	-	-	-	-	-	-	-	-	
Oth. def. & ill. def. disease	14	7	1	3	3	-	-	7	-	3	3	1	-	
Motor vehicle accidents	1	1	-	1	-	-	-	-	-	-	-	-	-	
All other accidents	6	2	2	-	-	-	-	4	2	1	1	-	-	
Suicide	1	-	-	-	-	-	-	1	1	-	-	-	-	

Bexley Hospital.

	Total persons	Male						Female						
		Total	75 - 79	80 - 84	85 - 89	90 - 94	95+	Total	75 - 79	80 - 84	85 - 89	90 - 94	95+	
All causes	110	32	12	12	5	3	-	78	28	22	21	7	-	
Oth. inf. & paras. disease	1	1	-	1	-	-	-	-	-	-	-	-	-	
Oth. mal. & lym. neoplasms	1	-	-	-	-	-	-	1	1	-	-	-	-	
Diabetes	1	1	-	1	-	-	-	-	-	-	-	-	-	
Vasc. lesions of nerv. sys.	5	-	-	-	-	-	-	5	3	-	1	1	-	
Coronary disease angina	11	4	2	1	1	-	-	7	3	3	1	-	-)	62
Hypertension with heart dis.	5	-	-	-	-	-	-	5	1	2	1	1	-)	
Other heart disease	40	10	6	3	-	1	-	30	11	9	8	2	-)	
Other circulatory disease	6	1	-	-	1	-	-	5	1	1	3	-	-)	
Pneumonia	28	13	2	6	3	2	-	15	2	7	3	3	-)	32
Bronchitis	2	1	1	-	-	-	-	1	-	-	1	-	-)	
Ulcer of stom. & duodenum	1	1	1	-	-	-	-	-	-	-	-	-	-	
Gastritis, enteritis & diarr.	1	-	-	-	-	-	-	1	1	-	-	-	-	
Oth. def. & ill. def. dis.	5	-	-	-	-	-	-	5	3	-	2	-	-	
All other accidents	3	-	-	-	-	-	-	3	2	-	1	-	-	

TABLE VII - QUARTERLY DEATHS ETC.

From 1958 onwards only the deaths of persons who have been in Bexley hospital for over six months are assigned to Dartford. To avoid distortion, hospital deaths are deducted from the Borough deaths each quarter to give the number of Town deaths.

	1st. quarter	2nd. quarter	3rd. quarter	4th. quarter	Year
Total deaths assigned to Dartford Borough by Registrar General.	191	181	127	134	633
Mental hospital deaths.	69	60	40	36	205
∴ Town deaths	122	121	87	98	428
Number of deaths - Dartford Town.					
1960	108	87	100	105	400
1961	131	111	95	115	452
1962	122	121	87	98	428
Crude quarterly death rates -					
Dartford Town 1960	9.6	7.8	8.9	9.4	8.9
1961	11.5	9.8	8.4	10.1	9.9
1962	10.9	10.8	7.8	8.8	9.6
England & Wales 1960	13.1	10.9	9.8	12.2	11.5
1961	15.6	10.9	9.5	11.9	12.0
1962	15.5	11.1	9.4	11.9	11.9

Town Deaths at home, in hospital and elsewhere.

	1st qr.		2nd qr.		3rd qr.		4th qr.		1962	1961
All ages	M	F	M	F	M	F	M	F	P.	P.
Home	20	16	12	12	15	8	16	9	108	125
Hospital	54	32	53	44	31	30	46	25	315	323
Elsewhere	-	-	-	-	3	-	1	1	5	4
	74	48	65	56	49	38	63	35	428	452
Aged 75+										
Home	11	14	4	4	2	4	6	5	50	57
Hospital	25	21	17	25	8	17	23	16	152	121
Elsewhere	-	-	-	-	-	-	-	-	-	1
	36	35	21	29	10	21	29	21	202	179

Deaths at Home or Hospital as % of all deaths.

All ages.										
Home	27	33	18	21	31	21	25	26	26	28
Hospital	73	67	82	79	63	79	73	71	73	71
Elsewhere	-	-	-	-	6	-	2	3	1	1
	100	100	100	100	100	100	100	100	100	100
Aged 75+										
Home	31	40	19	13	20	19	21	24	25	32
Hospital	69	60	81	87	80	81	79	76	75	67
Elsewhere										1
	100	100	100	100	100	100	100	100	100	100

1962. Deaths in Hospital.

	Dartford Town	Dartford R.D.	Northfleet U.D
All ages	73%	57%	49%
Aged 75+	75%	50%	47%

TABLE VIII - MAIN CAUSES OF DEATH ETC. (a)

Town

All ages.	All causes	Main causes	Other causes	Main causes in detail. (410-468) Circulatory Diseases	(140-205) Cancer	(330-334) Vasc. les. C.N.S.	(470-527) Resp. diseases.
1961	452	375	77	178	75	47	75
%	100%	83%	17%	39%	17%	10%	17%
1962	428	333	95	158	68	43	64
	100%	78%	22%	37%	16%	10%	15%

England and Wales.

	All causes	Main causes	Other causes	Circulatory Diseases	Cancer	Vasc. les. C.N.S.	Resp. diseases.
1961	551,752	455,401	96,351	204,655	99,915	77,623	73,808
%	100%	83%	17%	37%	18%	14%	13%
1962	557,636	461,679	95,957	208,217	101,608	78,297	73,557
%	100%	83%	17%	38%	18%	14%	13%

Town (compiled locally) 1962.

Aged 0 - 74 years.

	All causes	Main causes	Other causes	Circulatory Diseases	Cancer	Vasc. les. C.N.S.	Resp. diseases.
1st qtr.	51	40	11	12	13	3	12
2nd qtr.	71	48	23	15	19	6	8
3rd qtr.	56	43	13	24	8	6	5
4th qtr.	48	34	14	15	9	5	5
	226	155	61	66	49	20	30
	100%	73%	27%	29%	22%	9%	13%

Aged 75 years and over.

	All causes	Main causes	Other causes	Circulatory Diseases	Cancer	Vasc. les. C.N.S.	Resp. diseases.
1st qtr.	71	58	13	27	7	7	17
2nd qtr.	50	37	13	22	3	8	4
3rd qtr.	31	28	3	16	2	4	6
4th qtr.	50	45	5	27	7	4	7
	202	168	34	92	19	23	34
	100%	83%	17%	46%	9%	11%	17%

Deaths for each main cause as percentage of total deaths at all ages from that cause:

Aged 0 - 74 years.

	All causes	Main causes	Other causes	Circulatory Diseases	Cancer	Vasc. les. C.N.S.	Resp. diseases.
1st qtr.	42%	41%	46%	31%	65%	30%	41%
2nd qtr.	59%	56%	64%	40%	86%	43%	67%
3rd qtr.	64%	61%	81%	60%	80%	60%	45%
4th qtr.	49%	43%	74%	36%	56%	56%	42%
Year	53%	50%	66%	42%	72%	47%	48%

Aged 75 years and over

	All causes	Main causes	Other causes	Circulatory Diseases	Cancer	Vasc. les. C.N.S.	Resp. diseases.
1st qtr.	58%	59%	54%	69%	35%	70%	59%
2nd qtr.	41%	44%	36%	60%	14%	57%	33%
3rd qtr.	36%	39%	19%	40%	20%	40%	55%
4th qtr.	51%	57%	26%	64%	44%	44%	58%
Year	47%	50%	36%	58%	28%	53%	53%

Deaths at ages of 65 and over as percentage of deaths at all ages.

	65 to 74 years Town.	England and Wales.	75 years and over Town.	England and Wales.
1961	122 (27%)	26%	179 (40%)	43%
1962	78 (18%)	26%	202 (47%)	43%

TABLE VIII - MAIN CAUSES OF DEATH ETC. (b)

Month registered.	All causes	Main causes	Other causes	Circ. disease	Cancer		Vasc. les. C.N.S.	Resp. Disease
					Lung	Other		
TOWN DEATHS UNDER 75								
JANUARY	21	16	5	6	1	2	2	5
FEBRUARY	14	11	3	2	1	5	-	3
MARCH	16	13	3	4	1	3	1	4
APRIL	27	19	8	8	1	5	3	2
MAY	28	18	10	6	3	3	2	4
JUNE	17	11	6	2	2	4	1	2
JULY	27	19	8	10	2	2	5	-
AUGUST	15	11	4	5	1	2	-	3
SEPTEMBER	15	13	2	9	-	1	1	2
OCTOBER	14	8	6	5	1	-	2	-
NOVEMBER	13	8	5	6	1	1	-	-
DECEMBER	21	17	4	3	2	4	3	5
1962	228	164	64	66	16	32	20	30
TOWN DEATHS OVER 75								
JANUARY	38	31	7	15	-	4	2	10
FEBRUARY	16	14	2	5	-	2	1	6
MARCH	17	13	4	7	-	1	4	1
APRIL	17	14	3	6	1	1	2	4
MAY	17	15	2	10	-	1	4	-
JUNE	16	8	8	6	-	-	2	-
JULY	9	8	1	5	-	1	2	-
AUGUST	15	14	1	8	-	1	1	4
SEPTEMBER	7	6	1	3	-	-	1	2
OCTOBER	19	17	2	9	-	-	3	5
NOVEMBER	17	14	3	9	1	4	-	-
DECEMBER	14	14	-	9	2	-	1	2
1962	202	168	34	92	4	15	23	34
BEXLEY HOSPITAL DEATHS UNDER 75								
JANUARY	15	12	3	5	-	-	2	5
FEBRUARY	6	6	-	3	-	1	1	1
MARCH	8	4	4	1	-	1	-	2
APRIL	10	9	1	2	-	1	1	5
MAY	5	4	1	2	-	-	2	-
JUNE	5	5	-	-	-	-	1	4
JULY	9	8	1	3	1	1	1	2
AUGUST	8	7	1	1	-	3	-	3
SEPTEMBER	9	9	-	6	-	-	2	1
OCTOBER	7	5	2	2	-	2	-	1
NOVEMBER	7	7	-	2	-	2	1	2
DECEMBER	4	3	1	1	-	-	-	2
1962	93	79	14	28	1	11	11	28
BEXLEY HOSPITAL DEATHS OVER 75								
JANUARY	19	18	1	15	-	-	-	3
FEBRUARY	9	8	1	6	-	-	-	2
MARCH	12	12	-	5	-	-	2	5
APRIL	19	17	2	14	-	-	-	3
MAY	9	6	3	5	-	-	1	-
JUNE	11	11	-	6	-	-	-	5
JULY	7	6	1	2	-	-	1	3
AUGUST	6	4	2	3	-	-	1	-
SEPTEMBER	-	-	-	-	-	-	-	-
OCTOBER	6	6	-	4	-	-	-	2
NOVEMBER	7	6	1	1	-	1	-	4
DECEMBER	5	4	1	1	-	-	-	3
1962	110	98	12	62	-	1	5	30

TABLE VIII- MAIN CAUSES OF DEATH ETC. (c)

DEATHS DURING WHOLE YEARS.

	Aged 0 - 74 years -			Aged 75 and over -		
	Respiratory disease.	All causes.	% Respiratory.	Respiratory disease.	All causes.	% Respiratory
Town						
1958	27	258	10%	32	196	16%
1959	31	250	12%	29	186	16%
1960	27	213	13%	36	187	19%
1961	39	273	14%	36	179	20%
1962	30	226	13%	34	202	17%
Bexley Hospital						
1958	20	67	30%	26	82	32%
1959	28	91	31%	22	76	29%
1960	11	61	18%	10	60	17%
1961	25	76	33%	30	101	30%
1962	28	95	29%	30	110	27%

DEATHS DURING FIRST QUARTERS.

Town						
1958	15	72	20%	15	76	20%
1959	18	86	21%	16	79	20%
1960	8	53	15%	13	55	24%
1961	16	79	20%	12	52	23%
1962	12	51	23%	17	71	24%
Bexley Hospital						
1958	7	17	41%	15	43	35%
1959	15	34	44%	8	23	35%
1960	3	13	23%	3	11	27%
1961	12	22	55%	13	27	48%
1962	8	29	28%	10	40	25%

1958	Virus A2 influenza first quarter
1959	Virus A2 and B influenza first quarter
1960	No influenza the whole year
1961	Virus A2 influenza first quarter
1962	Virus B influenza first quarter. Fog 3rd to 7th December.

Atmospheric Pollution Dartford, micrograms /cu.M.

	Smoke		Sulphur dioxide	
	Dec. 1961	Dec. 1962	Dec. 1961	Dec. 1962
Average	226(1.06)	197(0.55)	213	358
Highest daily	714	946*	414	1852
Days exceeding 500	2	1	-	4
Days exceeding 1000	-	-	-	1
Days exceeding 1500	-	-	-	1
December 3	116(1.00)	312(1.58)	116	198
" 4	116(1.00)	400(1.39)	116	287
" 5	34(0.46)	996(0.54)	74	1852
" 6	79(0.62)	288(0.33)	128	864
" 7	203(0.62)	364(0 44)	330	839
" 8	313(0.76)	120(0.59)	414	202

* D.S.I.R. adjustment. Smoke/SO_2 ratio in brackets.

Lead dioxide units			1.7	3.3

TABLE IX - PREVALENCE OF INFECTIOUS DISEASES (other than tuberculosis).

	All ages	Under one	1-4	5-9	10-14	15-24	25-44	45-64	65+
Dysentery	3	-	-	3	-	-	-	-	-
Erysipelas	1	-	-	-	-	-	-	1	-
Food poisoning	1	-	-	-	-	-	1	-	-
Measles	20	1	14	2	2	1	-	-	-
Pneumonia	4	-	-	1	-	-	2	1	-
Puerperal Pyrexia	1	-	-	-	-	-	1	-	-
Scarlet Fever	3	-	1	2	-	-	-	-	-
Whooping Cough	1	-	1	-	-	-	-	-	-
Totals	34	1	16	8	2	1	4	2	-

In addition, notified from institutions, were Dysentery 23 (B.Flexner), Puerperal Pyrexia 27, Pneumonia 1.

Non-notifiable diseases reported from schools were Chicken Pox 185, Impetigo 3, Mumps 4, Conjunctivitis 4, Influenza 51, Rubella 116, Glandular Fever 1, Gastric Flu 2.

MEASLES

	St.Albans	Town	Brent	Highfield	Priory	Heath	Borough
January	-	-	-	-	1	-	1
Feb. -Apr.	-	-	-	-	-	-	-
May	-	-	-	1	-	-	1
June	-	-	-	-	1	-	1
July	-	-	-	-	-	-	-
August	-	-	-	-	1	-	1
September	-	-	-	-	-	-	-
October	-	-	-	1	1	2	4
November	-	1	-	-	-	-	1
December	2	1	4	-	2	2	11
	2	2	4	2	6	4	20

Biennial Cycle

	November	December	January	February	March	April	Total.
1950-51	138	288	161	58	44	20	709
1951-52	-	-	-	-	-	-	-
1952-53	154	238	255	77	88	17	829
1953-54	-	-	-	-	-	-	-
1954-55	-	-	6	43	284	473	806
1955-56	-	-	-	-	-	1	1
1956-57	-	-	12	25	107	303	447
1957-58	-	-	-	-	1	5	6
1958-59	20	7	20	47	105	175	374
1959-60	8	-	-	-	-	-	8
1960-61	207	206	149	81	117	46	806
1961-62	1	-	1	-	-	-	2
1962-63	1	11	10	33	147	135	337

SCARLET FEVER, WHOOPING COUGH AND PNEUMONIA.

Qtrs.	St. Albans			Town			Brent			High-field			Priory			Heath			Borough		
	SF	WC	P	SF	WC	P	SF	WC	P	SF	WC	P	SF	WC	P	SF	WC	P	SF	WC	P
1st.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	2
2nd.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
3rd.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	1	-	-	3	1	-
4th.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
	-	-	1	-	-	-	2	-	1	-	-	1	-	-	-	1	1	1	3	1	4

TABLE X - TUBERCULOSIS.

(a) Respiratory.

NOTIFICATIONS IN RECENT YEARS.

	Town	Bexley Hospital	Total		Town	Bexley Hospital	Total
1955	37	7	44	1959	15	9	24
1956	21	22	43	1960	9	3	12
1957	32	3	35	1961	20	5	25
1958	22	5	27	1962	17	9	26

NOTIFICATIONS BY AGE AND SEX.

	Total	0-1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65+
Males	17	-	-	-	-	1	1	4	-	3	3	5
Females	9	-	-	-	1	1	-	2	2	-	-	3
	26	-	-	-	1	2	1	6	2	3	3	8

Of the 17 cases notified from the town 4 were infectious, i.e. males aged 51, 57 and 69 and a female aged 70. 12 were not infectious the diagnosis of 1 of them being later revised. 1 further case known to be not infectious was a visitor from India on business whose ordinary residence was not in this country. The infectiousness of 1 (no fixed abode) was unknown.

Of the 9 cases notified from Bexley Hospital 1 was known to be infectious and was transferred to Grove Park Hospital.

NUMBER OF CASES OF RESPIRATORY TUBERCULOSIS ON THE REGISTER ON DECEMBER 31ST.

	Male	Female	Persons		Male	Female	Persons
1955	277	204	481	1959	283	223	506
1956	297	209	506	1960	250	201	451
1957	293	227	520	1961	255	197	452
1958	295	221	516	1962	266	191	457

CHANGES IN THE REGISTER IN 1962.

Additions:		Removals	
New notifications	26	Lost sight of	1
Moved into district	14	Left district	18
Returned to district	3	Recovered	9
		Not tuberculosis	1
	43	Deaths	9
			38

In 1962 9 cases were removed from the tuberculosis register following receipt of information of their deaths. They were:-

Sex.	Age.	Date tuberculosis registered.	Underlying cause of death	Contributory cause.	Whether infectious.
M	43	1945	Acute bronchitis Chronic bronchitis	Previous pulmonary tuberculosis	No.
M	47	1957	Coronary thrombosis	--	No.
(M	50	1962 No fixed abode.)	Cor pulmonale Chronic bronchitis	Pulmonary tuberculosis	?
M	57	1959	Carcinoma stomach	--	No.
M	65	1956 B.H.	Myocardial degen. Arterioscl. & emphysema Healed tub. of lungs	Upper resp catarrh	Yes.
M	67	1952 T.	Advanced pulmonary tuberculosis	--	Yes.
F	32	1962	Chorion epithel.	(Diagnosis-changed ante mortem)	
F	74	1960 B.H.	Chronic tuberculosis	---	Yes.
F	87	1961	Myocardial degen. Senility	Pulmonary tuberculosis	Yes

TABLE X - TUBERCULOSIS

(a) Respiratory (continued)

3 deaths registered in 1962 were removed from the tuberculosis register 1963:

Sex.	Age.	Date tuberculosis registered.	Underlying cause of death	Contributory cause.	Whether infectious.
M	66	1951 B.H.	Broncho pneumonia Prev. pul. tub.	Strangulated caecum and colon	No.
F	68	1962 B.H.	Pulmonary tuberculosis	--	?
F	55	1960 B.H.	Pulmonary tuberculosis	--	Yes.

The 1 Town death and the 5 Bexley Hospital deaths assigned in tables IV and V to tuberculosis were all registered cases and are included in the above.

MASS X-RAY Service, 1962

	Over 45 service				Routine Mass X-ray Service						
	Industry		Public		Industry		Public*		Total		
	M	F	M	F	M	F	M	F	M	F	Persons
No. X-rayed	793	6	481	44	2737	954	2485	3751	6496	4755	11251
Active Tuberculosis	-	-	-	-	2	-	2	2	4	2	6
Incidence ‰	-	-	-	-	0.73‰	-	0.8‰	0.5‰	0.6‰	0.4‰	0.5‰
NOT PREVIOUSLY X-RAYED											
No. X-rayed	17	-	24	13	676	297	970	1944	1687	2254	3941
Active tuberculosis	-	-	-	-	2	-	2	2	4	2	6
Incidence ‰	-	-	-	-	3.0‰	-	2.1‰	1.0‰	2.4‰	0.9‰	1.5‰

* includes 7 males and 83 females at a residential college (2 + 5 previously not X-rayed) all negative.

NON-TUBERCULOSIS CASES FOUND.

	Male.	Female.
Carcinoma of bronchus	3	1
Lobectomy for above	1	-
Non malignant neoplasm	-	1
Pneumoconiosis without P.M.F	1	-
Sarcoidosis	1	-
Intrathoracic Thyroid	1	-
Bronchiectasis	2	3
Pneumonitis	12	5
Chronic bronchitis	1	-
Pleural thickening	3	1
Linear atelectasis	-	1
Probable asthma	-	1
Fibrosis	-	1
Diaphragmatic hernia	-	1
Cardiovascular lesions	10	15

TABLE X - TUBERCULOSIS

(a) Respiratory (continued)

DARTFORD CHEST CLINIC.

Dartford Borough provides only about a quarter of the population served by the clinic.

	1958	1959	1960	1961	1962
Total persons attending for first time	1,452	1,688	1,693	1,516	1,715
(a) Referred by doctors	934	1,016	1,134	1,081	1,217
(b) Contacts	454	587	506	356	448
(c) From other sources, e.g. transfers	64	85	53	79	50
New cases					
(a) Active pulmonary tuberculosis	101	95	79	50	57
(b) Non-pulmonary tuberculosis	15	22	13	14	10
(c) Bronchial neoplasm	- Not recorded -			23	39
Found to be sputum positive					
(a) New cases	45	42	39	21	25
(b) Old cases	29	31	14	9	24
Total attendances	7,190	7,695	7,797	7,197	7,328
(a) Total individuals attending	-	3,595	3,536	3,342	3,576
(b) Average attendances per individual	-	2.2	2.2	2.15	2.05

In addition to the above some 500 conditions other than tuberculosis or cancer were found each year.

(b) Non-respiratory.

NOTIFICATION IN RECENT YEARS

1954	6	1957	2	1960	2
1955	6	1958	6	1961	8
1956	2	1959	2	1962	2

The two new cases were a female aged 24 with genito urinary tuberculosis and a female aged 27 with tuberculosis of neck glands.

NUMBER OF CASES OF NON-PULMONARY TUBERCULOSIS ON REGISTER AT DECEMBER 31ST.

	Male	Female	Persons		Male	Female	Persons
1954	30	42	72	1959	25	30	55
1955	24	36	60	1960	25	31	56
1956	27	33	60	1961	27	35	62
1957	25	33	58	1962	25	34	59
1958	28	33	61				

CHANGES IN THE REGISTER WERE AS FOLLOWS:

Additions:		Removals:	
New notifications	2	Recovered	5

TABLE XI - VACCINATIONS

Virus Diseases

(a) POLIOMYELITIS.

Vaccination doses received in the five years ending Dec 31st 1962.

Second doses

Born	Injected 1958	Injected 1959	Injected 1960	Injected 1961	Injected 1962	Oral 1962	Total
1957-1962	615	702	644	811	117	448	3337
1943-1956	4515	1090	119	275	15	75	6089*
1933-1942	)		237	315	20	101	6889
1921-1932	) 942	2544	) 1422	1080	) 41	) 156	
Others	)		)	31	)	)	
Total	6072	4336	2422	2512	193	780	16315

Third doses

Born	Injected 1958	Injected 1959	Injected 1960	Injected 1961	Oral and Injected 1962	Oral 1962	Total
1957-1962	18	679	632	711	627	448	3115
1943-1956	401+	4633	771	455	230	75	6565*
1933-1942	)	)	1422	284	258	101	)
1921-1932	) 22	) 1148	) 783	872	) 839	) 156	) 5910
Others	)	)	)	25	)	)	)
Total	441	6460	3608	2347	1954	780	15590

Percentage of young population vaccinated

Born	Estimated population	No. had 2 doses	% of population	Total * 3 doses	% of population
1957-1962	4352	3337	77%	3115	71%
1943-1956	8578	6089	71%	6565	77%
1943-1962	12930	9426	73%	9680	75%

*Vaccination began in 1956, some 3rd doses received their second doses in 1956 or 1957. 2nd doses of incoming population not recorded here when given before arrival. Thus more with 3rd doses than with 2nd doses within years 1958-62.

Fourth doses*

The fourth dose is given shortly after school entry therefore those receiving fourth doses in 1961 would still be in the 1951-1957 age group in 1962

Born	Estimated population	4th dose 1961	4th dose 1962	Total	Percentage
1951-1957	4088	2472	623	3095	76%

COMPARISON WITH OTHER AREAS

Vaccinations in five years 1958-1962 of those born 1943-1962 expressed as a percentage of estimated population.

	Dartford R.D.	Dartford Borough	Kent A.C.
2 doses	76%	73%	87%
3 doses	84%	75%	76%

* In 1961 the fourth injection for school children under the age of twelve years had to be postponed because of the shortage of vaccine. When oral vaccine was introduced supplies were sufficient to resume the giving of the fourth dose for school children under twelve years of age.

In 1962 facilities continued to be made available for all persons over six months and under forty years of age.

TABLE XI - VACCINATIONS (continued)

(b) SMALLPOX.

NUMBERS VACCINATED AND REVACCINATED by age at date of vaccination.

Year	Under 1 year	1 year	2 - 4	5 - 14	15 or over	Total
		Vaccinated				
1962	562	81	183	639	908	2373
1961	500	38	13	13	6	570
1959	433	38		14	9	494
1958	357	27		16	20	420
		Revaccinated				
1962	-	10	137	916	2065	3128
1961	-	-	-	-	6	6
1959	-	-		4	11	15
1958	-	1		10	29	40

For the year 1960 figures on these lines were not available.

INFANT VACCINATION RATE

Up to the end of 1961 most infants who were vaccinated were vaccinated in the first year of life but in 1962 more infants than in former years were vaccinated at a later age. The percentage of the number of births in a given year of those vaccinated while under one year of age in that year is used here as a vaccination rate. It contains an assumption that the average age of vaccinations will be constant (those under one year in 1962 can be born in 1961 or 1962).

	Number of live births	Number vaccinated under 1 year	Percentage of births of those vaccinated.
1962	789	562	72%
1961	824	500	61%
1960	735	No figures available.	
1959	700	433	62%
1958	688	357	52%

SCHOOL CHILD IMMUNITY - DECEMBER 1962 (approximate)

Estimated population aged 5-14 Born 1948-57	Vaccinated or revaccinated before 1962 in school years	Vaccinated 1962	Revaccinated 1962	Vaccinated or revaccinated in school years by Dec 1962	% aged 5-14 with immunity Dec. 1962
6015	150 (Estimate)*	639	916	1705	28%

SCHOOL CHILD REVACCINATIONS - DECEMBER 1962 (approximate)

Av. infant vaccination rate	No. eligible for revaccination	Revaccinated before 1962 in school years.	Revaccinated 1962	Total revaccination before 1962 in school years.	% of those eligible with immunity from revaccination.
60%	3609	100 (estimate)†	916	1016	28%

* roughly 15 a year. † roughly 10 a year.

COMPARISON WITH OTHER AREAS

	Dartford Rural Dis.	Dartford Borough	Kent A.C.	England & Wales
Percentage of 1962 births of those vaccinated under 1 year	74%	72%	63%	49%

TABLE XI- VACCINATIONS (continued)

Bacterial Diseases

(c) DIPHTHERIA.

NUMBER VACCINATED

	Age at 31st December	Primary inoculations done in the year	Reinforcing inoculations done in the year
1962	0 - 4 years	665	390
	5 - 14 "	17	277
1961	0 - 4 years	795	244
	5 - 14 "	106	457
1960	0 - 4 years	794	139
	5 - 14 "	37	279

The above include courses completed for diphtheria alone or diphtheria/tetanus or diphtheria/whooping cough/tetanus combined.

PRIMARY VACCINATIONS AT AGES 0 - 4 YEARS

Born	Vaccinated					Vaccinated 1958-1962	Estimated population
	1958	1959	1960	1961	1962		
1962	-	-	-	-	318	318	773
1961	-	-	-	376	326	702	807
1960	-	-	332	331	13	676	724
1959	-	142	385	41	4	572	689
1958	113	353	46	24	4	540	668
Total vaccinated	113	495	763	772	665	2808	3661

Percentage of related population vaccinated

Born	Vaccinated					Total vaccinated 1958 - 1962
	1958	1959	1960	1961	1962	
1962	-	-	-	-	41%	41%
1961	-	-	-	47%	40%	87%
1960	-	-	46%	46%	2%	94%
1959	-	20%	56%	6%	1%	82%
1958	17%	53%	7%	4%	0%	81%
% of those vaccinated by Dec.1962	4%	18%	27%	27%	24%	100%
% of 0-4 population of 1962 vaccinated	3%	14%	21%	21%	18%	77%

COMPARISON WITH OTHER AREAS

	Dartford Rural Dis.	Dartford Borough	Kent A.C.
Percentage of estimated population born 1961 vaccinated in 1961 or 1962	85%	87%	83%

TABLE XI - VACCINATIONS (continued)

(d) WHOOPING COUGH

PRIMARY VACCINATIONS

Year	Age at Dec. 31st. 0 - 4 years	Age at Dec. 31st. 5 - 14 years
1962	647	7
1961	740	49
1960	759	23

PRIMARY VACCINATIONS OF THOSE AGED 0 - 4 YEARS ON DECEMBER 31st 1962.

Born	Vaccinated						Estimated population
	1958	1959	1960	1961	1962	1958-1962	
1962	-	-	-	-	331	331	773
1961	-	-	-	370	299	669	807
1960	-	-	332	308	12	652	724
1959	-	292	367	31	3	693	689
1958	229	281	32	17	2	61	668
Total vaccinated	229	573	731	726	647	2906	3661

Percentage of children with primary vaccination

Born	Vaccinated					
	1958	1959	1960	1961	1962	1958-1962
1962	-	-	-	-	43%	43%
1961	-	-	-	46%	37%	83%
1960	-	-	46%	42%	2%	90%
1959	-	43%	53%	5%	0%	101%
1958	34%	42%	5%	3%	0%	84%
% of 0-4 vaccinated population Dec. 1962	8%	20%	25%	25%	22%	100%
% of 0-4 total population Dec. 1962	6%	16%	20%	20%	18%	80%

Diphtheria/whooping cough/tetanus combined vaccine was introduced in 1960 hence primary vaccinations from 1960 onwards are similar in number to diphtheria vaccinations.

COMPARISON WITH OTHER AREAS

	Dartford R.D.	Dartford Borough	Kent A.C.
Percentage of estimated population born 1961 vaccinated in 1961 or 1962	84%	83%	83%

(e) TETANUS

In view of the introduction of the combined vaccine in 1960 the numbers of primary vaccinations against tetanus in 1961 and 1962 can be assumed to be almost identical with those for diphtheria vaccination.

(f) TUBERCULOSIS

Children in close contact with patients suffering from tuberculosis are, if necessary, vaccinated with B.C.G. The following vaccinations were carried out at the Chest Clinic, Dartford:-

	Children under 15 years of age			
	1959	1960	1961	1962
Dartford R.D.	160	139	131	184
Dartford Borough	133	126	126	129

Some persons attend other clinics and therefore these figures are incomplete.

Vaccination of school children is carried out by the School Health services. These children are skin tested and those who do not react are vaccinated. Those who do react are referred to the Chest Physician for further investigation. Figures are not available for these vaccinations.

TABLE XII- INJURY

(a) ACCIDENTS IN THE HOME

PERSONS ADMITTED TO DARTFORD GROUP OF GENERAL HOSPITALS.

	Age	Falls	Burns & scalds	Poisoning	Other	Total
1960	0 - 4	2	3	3	3	11
	5 - 64	6	1	-	1	8
	65+	16(5 died)	-	-	-	16
		24	4	3	4	35
1961	0 - 4	3	1	1	1	6
	5 - 64	3(1 died)	-	4	7	14
	65+	16(3 died)	2	-	1	19
		22	3	5	9	39
1962	0 - 4	2	2	-	4	8
	5 - 64	7	1	1	7	16
	65+	14(4 died)	-	1	1	16
		23	3	2	12	40

Length of stay in hospital in weeks.

	Under 1 week	1-	2-	3-	4-	8-	12-	16+	Cases
1962	17	4	3	-	6	5	2	3	40

Deaths in above admissions.

Age	Sex.	Cause.
72 yrs	F	Broncho pneumonia. Fractured neck of right femur. Mitral stenosis.
78 yrs	F	Purulent bronchitis.
79 yrs	F	Pul. embolism. Phlebothrombosis of left femoral veins. Fractured neck of left femur.
81 yrs	F	Hypostatic pneumonia. Congestive heart failure.

DEATHS OCCURRING OUTSIDE DARTFORD GROUP OF GENERAL HOSPITALS.

8 mths	M	Electrocution.
13 mths	M	Strangulation by pram reins.
49 yrs	F	Barbiturate poisoning. Open verdict.
75 yrs	M	Barbiturate poisoning. Open verdict.
77 yrs	M	Carbon monoxide poisoning (Domestic coal gas).
77 yrs	F	Carbon monoxide poisoning (Domestic coal gas).
82 yrs	F	Carbon monoxide poisoning (Domestic coal gas).
89 yrs	F	Pulmonary embolism. Phlebothrombosis of veins of right leg. Fractured neck of right femur.

The following occurred in a long stay hospital -

67 yrs	F	Pulmonary embolism. Thrombosis of veins of left leg. Fractured neck of left femur.
73 yrs	F	Broncho pneumonia. Fractured neck of right femur.
76 yrs	F	Broncho pneumonia & pulmonary embolism. Phlebothrombosis of vein of left leg. Fractured neck of left femur.
78 yrs	F	Pulmonary embolism. Thrombosis of veins of right calf. Fractured neck of right femur.
89 yrs	F	Pulmonary embolism. Phlebothrombosis of veins of right leg. Fracture of neck of right femur.

TABLE XII- INJURY (CONTINUED).

(b) MOTOR VEHICLE ACCIDENTS.

Casualties (not necessarily Borough residents) on local roads.

The following figures are taken from the Chief Constable's Analysis of road accidents for 1962:

Local Authority	Total injury accidents	Killed	Seriously injured	Slightly injured	Total.
Dartford R.D.	336	16	134	342	492
Northfleet U.D.	108	3	31	100	134
Swanscombe U.D.	44	1	16	45	62
Dartford M.B.	267	5	85	241	329

Deaths of Borough residents not necessarily on Borough roads.

Age. years.	Sex.	Type of accident.	Place.
4	F	Motor car/articulated lorry.	Rochester Way, Bexley.
20	M	Motor cycle/motor cycle.	?
38	M	Pedestrian/motor car.	Road Dartford Heath.Pt.B.H.
42	M	Motor car/articulated lorry.	Rochester Way, Bexley.
42	M	Passenger in overturned car	Littlebrook Manorway.
47	M	Motor cycle combination/ stationery car.	?
52	M	Motor cycle/motor van.	Attlee Drive, Dartford.
56	M	Passenger in overturned car.	Littlebrook Manorway.
57	M	Pedestrian/motor car.	? Pt.B.H.
82	M	Pedestrian/motor car.	Roundabout Highfield Road & Heath Street.

(c) OTHER ACCIDENTS.

11	M	Drowning.	Sea.
13	M	Fell 100 feet into Chalk pit.	?Stone.

(d) SUICIDE.

Age	Sex	Cause of death.
24	F	Carbon monoxide poisoning.
32	F	Carbon monoxide poisoning.
49	M	Carbon monoxide poisoning.
51	M	Aspirin poisoning.
76	F	Drowning.

APPENDIX I.

HOUSING

NEW DWELLINGS.

The following dwellings have been completed in the last six years:-

	1957	1958	1959	1960	1961	1962
By Council enterprise	152	68	124	78	109	33
By Private enterprise	217	254	283	175	82	144
	369	322	407	253	191	177

The dwellings completed by the Council were as follows:-

	1960	1961	1962
One bedroom	12	38	-
Two bedrooms	65	60	4
Three bedrooms	-	9	-
Four bedrooms	-	2	-
Bungalows	1	-	29
	78	109	33

APPLICANTS FOR COUNCIL HOUSES.

Number of applicants on waiting list at end of December 1959 - 1265
Number of applicants on waiting list at end of December 1960 - 1276
Number of applicants on waiting list at end of December 1961 - 1268
Number of applicants on waiting list at end of December 1962 - 1180

HOUSING PRIORITY ON MEDICAL GROUNDS.

Recommendations were as follows:-

	Tuberculosis. Total applications received and number of points given.				Other than tuberculosis. Total applications received and number of points given.			
	Total	0	1-5	6-10	Total	0	1-5	6-10
1961 (a)*	3	-	3	-	19	6	13	-
(b)*	14	-	14	-	80	22	57	1
1962 (a)*	-	-	-	-	16	10	6	-
(b)*	4	1	3	-	76	21	50	5

UNFIT HOUSES.

Made fit by informal action	73
Made fit by statutory notice	18
Demolished by Council action	21
Closed by Statutory action	2
Families displaced	34

Five year programme -

Houses dealt with	206
Houses in which action not finalized	23
Houses not yet reported on	29
Houses in programme	258

STATUTORY OVERCROWDING

Known cases	Nil.

IMPROVEMENT GRANTS

Name of dwellings improved	39

Discretionary grants - £5191. Standard grants - £1531

CARAVANS.

Site licences in force 31.12.62	3
Number of caravans permitted	12

*(a) = for transfers, (b) = for rehousing.

APPENDIX II.

WATER.

GATHERING GROUND. The chalk below this district is part of the gathering ground for this part of Kent. The wells of the Metropolitan Water Board draw this water which is pumped into a grid system from which this and neighbouring districts obtain their supply. One of the Kent Area wells of the Metropolitan Water Board is in the centre of Dartford.

ACCESSIBILITY OF SUPPLY. All the permanent dwellings of Dartford Borough have the Board's water piped into them. Two hospitals and three factories have their own well supplies. When necessary the hospital supplies are supplemented or supplanted by the Metropolitan Water Board supply which is kept accessible for this purpose.

QUANTITY. Abundant at present.

QUALITY.

(a) Bacteriological.

In the following the number of E. coli, type 1 per 100 ml. is used to summarize the information provided by samples.

	Number of samples.	E.coli type 1. Average per 100 ml.
Dartford Metropolitan Water Board well (raw water)	249	0
West Hill hospital (raw water)	13	0
Bexley hospital (chlorinated in well)	4	0
J. & E. Hall Ltd. (3 wells) (raw water)	12	0
Dartford Paper Mills Ltd. (2 wells) (raw water)	4	0
London Paper Mills (2 wells) (raw water)	6	0

(b) Chemical.

General. In the following the number of parts per million of albuminoid ammonia as nitrogen is used to summarize the information provided by samples.

	Number of samples.	Av. Alb. Am. p.p.m.
Dartford Metropolitan Water Board well	4	0.03
West Hill hospital well	1	0.01

Nitrates. With the feeding of newborn and premature babies in mind the water at West Hill hospital was sampled at monthly intervals for estimation of nitrates.

No. of samples.	Av. Nitrate nitrogen.	Range.
11	12 p.p.m.	7 - 14 p.p.m.

Copper. A sample taken for bluish deposit in kettle and copper service pipe showed 1.05 p.p.m.

SWIMMING BATHS.

Bacteriological analysis of swimming bath water is done to ascertain the sterilizing ability of the chlorine dosage on the pollution introduced by bathers.

	Number of samples.	E. coli. type 1. Average per 100 ml.	Plate count. Av.	Plate count. Range.
Burnham Road -				
Shallow end	9	0	3	0-6
Deep end	9	0	4	0-10
Dartford College of Physical Education*-				
Shallow end	5	0	5	0-24
Deep end	5	0	3	0-10

* Samples taken by L.C.C also show similar results.

APPENDIX III.

DRAINAGE.

With the few exceptions mentioned below all the dwellings in the Borough are on main drainage, the sewage being led to the works of the West Kent Main Sewerage Board on the periphery of the Borough by the River Thames.

The work carried out in 1962 on the instigation of the Council's Public Health Inspectors was as follows:-

Drains	- cleared by service of notice	6
	cleared by department	389
	repaired	13
	reconstructed	1
	gully fenders repaired	1
	inspection chambers provided	-
	inspection chambers repaired	8
	vent shaft or air inlet repaired	1
Cesspools	- emptied	1
	repaired	1
	abolished	0
Drainage work	- drains tested by water	35
	drains tested by smoke, colour etc.	21
	visits for supervision etc.	507

Where main drainage was not in use the position in 1962 was:-

Domestic premises -		
	Cesspool (foul and sink waste)	41
	Cesspools for foul water only	1
	Cesspools for sink with earth or chemical closets	4
	Septic tanks	7
Factories -		
	With cesspools	4
	With septic tanks	4
	With chemical closets	4

Some of the cesspools are emptied by the Council, some are emptied by other arrangements, others are never emptied.

APPENDIX IV.

FOOD HYGIENE.

FOOD PREPARATION. Food premises and inspections by the Public Health Inspectors were:

	Premises.	Inspections.
Bakehouses	6	27
Butchers	24	222
Cafes, restaurants, canteens etc.	64	254
Confectioners	41	105
Dairies	3	8
Fish fryers and fishmongers (including market stalls)	16	146
Greengrocers	29	140
Grocers	56	384
Ice-cream premises (including manufacturers)	92	101
Licensed premises (non-catering)	44	156
Slaughterhouses	1	30

Although three premises are registered as dairies, one only is used as such and this only on rare occasions. The figure for ice cream premises is the number of premises registered most of which are grocers or confectioners, the inspections of which are recorded under these headings.

Registered premises. Section 16 of the Food & Drugs Act, 1955 requires certain premises to be registered. Those registered in 1962 were:

Sausage making and cooked meats	34
Curing and preservation of fish	4
Ice cream manufacture and sale	1
Ice cream storage and sale	91

Visits to these premises are included in the figures tabulated above.

As a result of the foregoing inspections, 20 notices were served and 19 notices were complied with during the year. The following summarises the defects remedied:-

Premises and equipment cleansed, repaired or improved	8
Provision of first aid or facilities for cleanliness	10
Protection of food from risk of contamination	2
Repair or cleaning of sanitary accommodation	-
Miscellaneous	3

MILK. The Regulations require this Council to register (a) dairies not being dairy farms, (b) distributors. In 1962 3 dairies and 45 registered distributors were retailing milk in the Borough. All milk sold must be designated milk and regulations require dealers selling this milk to be licensed by this Council. Licences issued in 1962 were as follows:-

Designation.	Prescribed test.	Dealers' licences.
Tuberculin tested	Methylene blue.	16
Pasteurized	Methylene blue and phosphatase.	16
Sterilized	Turbidity of filtrate by heat.	15

For possession of a licence milk sold under these designations must comply with the prescribed tests. For the purpose of these tests the following samples were submitted to the County Analyst by the Council's Public Health Inspectors.

Tuberculin tested	9)	All satisfied the prescribed tests.
Pasteurized	25)	
Sterilized	4)	

ICE CREAM. Ice cream is also tested for cleanliness by the time it takes to bleach methylene blue. Anything shorter than 2½ hours (i.e. Grades III & IV) means that the conditions of manufacture and handling require investigation. The results of samples submitted to the laboratory by the Council's Public Health Inspectors were as follows:-

Solid Ice Cream.

	Hot Mix.	
	Manufactured inside district.	Manufactured outside district.
Grade I	9	3
Grade II	3	-
Grade III	3	-
Grade IV	-	-

Soft Ice Cream.

The appearance of soft ice cream on sale presented problems of preparation which received special attention by the Council's Chief Public Health Inspector. Results of sampling were:-

	Manufacturer.					
	A	B	B powder	C	C powder	D
Grade I	4	1	-	6	17	1
Grade II	2	2	1	2	6	-
Grade III	1	2	-	4	5	-
Grade IV	-	3	-	1	8	-

MEAT. The following relate to carcases inspected by the Council's public health inspectors at the slaughterhouse of Bexley Hospital.

	Cattle excluding cows.	Cows	Calves	Pigs.
Killed	1	3	5	100
Inspected	1	3	5	100
All diseases except tuberculosis.				
Whole carcases rejected	-	-	1	1
Parts of carcases rejected	-	1	-	8
Percentage diseased	-	33%	20%	8%
Tuberculosis.				
Carcases or parts rejected	-	-	-	-

SEIZURE OR SURRENDER OF UNSOUND FOOD. The amount of unsound food surrendered in 1962 was:-

	Tons	Cwts	lbs.
Fish	-	-	98
Meat, poultry etc.	-	2	88
Groceries	-	1	21
Tinned foods	-	9	41
Frozen foods	-	9	43
	1	3	67

FOOD UNFIT FOR CONSUMPTION EXPOSED FOR SALE. Items of food the fitness of which was the subject of complaint to this office by customers were:-

	Number.	Confirmed.
Tainted "off" or old	8	2
Moulds	6	4
Dirt	4	3
Insects or their larvae	2	2
Slug	1	1

LEGAL PROCEEDINGS.

	Fine £. s.	Advocate's Fee £. s.	Costs £. s.
Dirty milk bottle. Offence 1961	3 0	-	6 6
Milk containing dirt " "	20 0	5 5	-
Dirty milk bottle	Plea of guilty but absolute discharge.		
Fish paste containing fly. 1961	15 0	10 0	-
Orange drink containg slug	25 0	-	5 5
Mouldy sponge bar	25 0	-	5 5
Fish (skate) unfit for consumption '61	10 0	2 2	19 7
Smoking when handling tomatoes	5 0	-	-
Smoking where there was open food	5 0	-	-
Smoking when handling cucumbers	5 0	-	3 3
Smoking when handling fish. 1961	10 0	2 2	-
No water supply available 1961	1 0	-	-
No wash-hand basin provided 1961	1 0	-	-
No facilities for washing food equipment 1961	1 0	-	-
No "Wash your hand" notices displayed	10 0	-	-
No hand washing facilities supplied	10 0	-	-
Dirty milk bottle (Heard 1963)	25 0	2 5	-

APPENDIX V.

FOOD CONTENT.

SAMPLING. 163 informal samples were obtained by the Council's public health inspectors of food or drugs exposed for sale and these were sent for analysis.

2 formal samples were obtained following the finding of excessive water in informal samples of creamed rice milk pudding. They were also found to be adulterated and proceedings were initiated.

23 samples were reported as inferior. The suppliers and manufacturers were informed of the unsatisfactory qualities of these goods.

CUSTOMERS' COMPLAINTS. 10 related to recognisable items of foreign matter in food and 1 to wrong description of food. The suppliers and manufacturers were informed of the unsatisfactory qualities of their goods.

LEGAL PROCEEDINGS.

	Fine.	Advocates' fee.	Costs.
Creamed rice pudding. Excessive water (Heard 1963)	£10	£7. 7.	-
Giant prune plums. Sold as Victoris plums. (Heard 1963)	Case dismissed.		
Leaf containing foreign matter (Heard 1963)	£25	-	£7. 1.
Bun containing twine.	£30	-	£7. 7.

APPENDIX VI.

AIR HYGIENE.

SMOKE CONTROL.

DOMESTIC. In 1962 the Minister confirmed without modification the Area No. 2 Smoke Control Order to come into operation in October, 1962. The Number of dwellings in the area was 858 and the total estimated cost of the works required was £8997.

The Minister also confirmed the Temple Hill (North) Smoke Control Order to come into operation in December 1962. The number of dwellings affected by the Order was 632 and the total estimated cost of the works was £225. The area is part of a large neighbourhood of Council-owned dwellings.

The survey of area No. 3 was completed and the Order was submitted to the Minister for confirmation with a recommendation that it should come into operation in October 1963. The number of dwellings involved was 894 of which 542 were Council owned.

Bonfires. The Council's public health inspectors dealt with 10 complaints of smoke nuisance from bonfires.

INDUSTRIAL. During the last few years industry in the area has been engaged in the modernisation of steam raising plant and generally converting to fully automatic oil fired boilers. Hospitals in the area have pursued a similar policy.

MEASUREMENTS.

The monthly collections of deposit and exposures of lead dioxide analysed by the County Analyst with the daily measurements of smoke and acidity made in this office were included in the readings for the whole Thameside area distributed by the Thameside Joint Committee for the Abatement of Atmospheric Pollution.

APPENDIX VII

VERMIN CONTROL AND DISINFESTATION.

Rats and Mice.

	Premises involved.
Complaints of infestation	186
Infestations found by independent survey	14
Premises treated for rats	134*
Premises treated for mice	24*

* In addition to these, bait was given or sold for the treatment of 4 rat infestations and 22 mice infestations.

	Complaints.	Treatments.	Premises.
Bed bugs	15	18	15
Woodworm	4	-	-
Wasps	12	10	9
Fleas	2	3	2
Other insects	16	1	1
Premises disinfected for tuberculosis	-	6	6

APPENDIX VIII

HYGIENE OF PLACES OF WORK.

FACTORIES. The Council enforces the provision of sanitary conveniences in all factories. In factories without mechanical power the Council also enforces the provision of adequate cleanliness, temperature, ventilation and drainage.

Number on register - December 1962	217
Inspections in 1962	462
Defects found	13
Defects remedied	13
Defects referred to H.M. Inspector	1
Defects referred by H.M. Inspector	1
Outworkers in the Borough - December 1963	20

SHOPS. The Council enforces the provision of adequate sanitary accommodation, temperature, washing facilities, seats, ventilation, closing hours and meal intervals.

	1961	1962
Inspections	105	495
Notices served	3	16
Notices complied with	3	13

The big increase in the total number of inspections compared with the preceding year arose out of complaints made regarding Sunday trading.

APPENDIX IX.

HYGIENE FACILITIES PROVIDED BY COUNCIL.

SLIPPER BATHS. The Council provide and maintain the public slipper baths and washing facilities at Spital Street. The number of persons using these were -

	1959	1960	1961	1962
Men	15,357	15,512	14,017	11,895
Boys	491	531	540	405
Women	3,774	3,220	3,558	3,473
Girls	445	441	476	404
	20,067	19,704	18,591	16,177

PUBLIC CONVENIENCES. The Council provide conveniences at Spital Street, Market Street, The Brent, Hesketh Park and Central Park. The Council's public health inspectors made 184 inspections of the conveniences. In addition 31 inspections were made of public conveniences at Inns.

ACKNOWLEDGEMENT.

Our thanks are due to numerous colleagues for providing information for this report. These include: The Director Water Examination, Metropolitan Water Board, Director Mass Radiography, Registrar General, Chief Constable, County Analyst, Director Public Health Laboratory, County Medical Officer of Health, Chest Physician, other Medical Colleagues, Inspector National Society for the Prevention of Cruelty to Children, Borough Engineer and Survey and the Housing Manager.

PUBLIC HEALTH COMMITTEE.

1962 - 1963

Chairman: Alderman Mrs A. Ager.
Deputy Chairman: Councillor A. E. Exeter.

The Mayor (Councillor D. H. H. Stubbs)
The Deputy Mayor (Alderman E.C.G. Lanyon)
Alderman C. Bareham.
Alderman E. T. Lenderyou.
Councillor J. B. Clark.
Councillor A. L. Cowell.
Councillor J. Huggett.
Councillor Mrs D. Smith.
Councillor E. H. Snook.
Councillor R. A. Wells.
Councillor J. S. R. Wise.

PUBLIC HEALTH OFFICERS.

Medical Officer of Health (Part time)	J. H. Hudson.
Chief Public Health Inspector	T. H. Iddison.
Additional Public Health Inspectors -	J. Wann. K. Palmer J. Wightman.
Pupil Public Health Inspector	T. E. Hagreen.
Chief Clerk	Miss E. Sorrell.
Clerk	Mrs M. Pestell.